OCCUPATIONAL EMPLOYMENT IN TRADE, TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES

NORTH CAROLINA

1979

EMPLOYMENT SECURITY COMMISSION
OF NORTH CAROLINA

Glenn R. Jernigan, Chairman

This is a cooperative program involving the Employment Security Commission of North Carolina, the Bureau of Labor Statistics, and the Employment and Training Administration of the U.S. Department of Labor.

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A Labor Market Information Publication

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INTRODUCTION

The manpower planning process has increased the need for information on occupational employment. The Employment and Training Administration and the Bureau of Labor Statistics, both of the U. S. Department of Labor, have developed the Occupational Employment Statistics (OES) Program to help meet these manpower planning needs. The OES Program has three main elements:

1. Periodic surveys of approximately 2,000 occupations by industry.
2. The National/State Industry Occupational Employment Matrix.
3. State and Area Manpower Projections by Industry and Occupation.

This report is the tenth published output of a North Carolina Occupational survey. This publication is based on a survey conducted between August, 1979 and February, 1980. Three divisions as defined by the 1972 Standard Industrial Classification Manual (SIC) are covered by this survey. These divisions are: Wholesale Trade, (2) Retail Trade, and (3) Transportation, Communications, Electric, Gas, and Sanitary Services (except Railroads and the U. S. Postal Service). Data for the Postal Service will be included in the next publication for employment in government. Data for Railroads are being collected by the Bureau of Labor Statistics and provided to individual states.

In 1979 there were 591,300 persons employed in industries covered by this survey. This was 24.9 percent of the total nonagricultural wage and salary employment in the state. In the trade division there were 482,900 workers employed in 1979 in North Carolina. Of this total, 25.5 percent or 123,000 were employed in wholesale trade industries and 74.5 percent or 359,900 were employed in retail trade.

Chart A shows the relationship of nonagricultural wage and salary employment for the major divisions in the state for 1979. Chart B shows the average annual nonagricultural wage and salary employment in North Carolina from 1972 to 1979. Charts C and D show the average annual employment for trade and transportation, communication and public utilities in the state from 1972 to 1979.

NOTE: Employment data for Charts A, B, C, and D are expressed as average annual figures. The information was obtained from the Current Employment Statistics (CES) unit of the Bureau of Employment Security Research.

CHART A: 1979 NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT BY MAJOR DIVISION

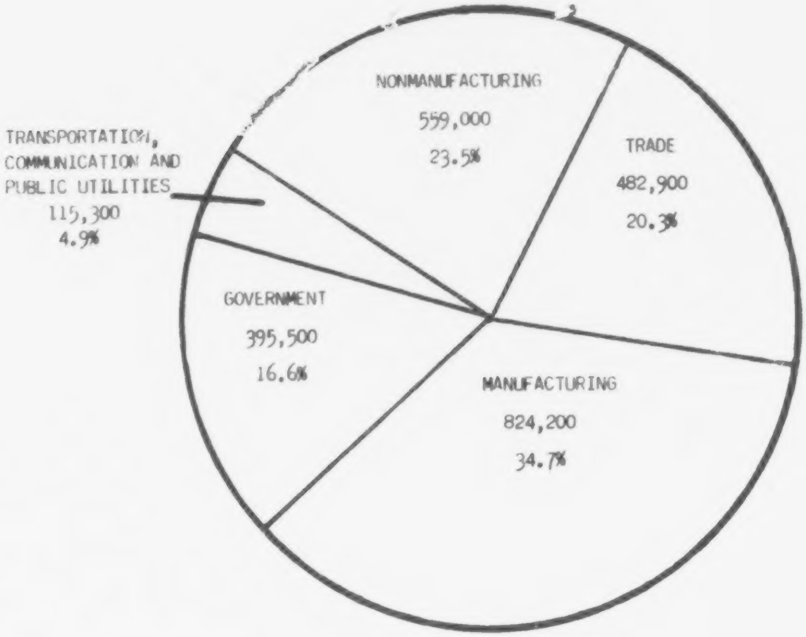


CHART B: NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT

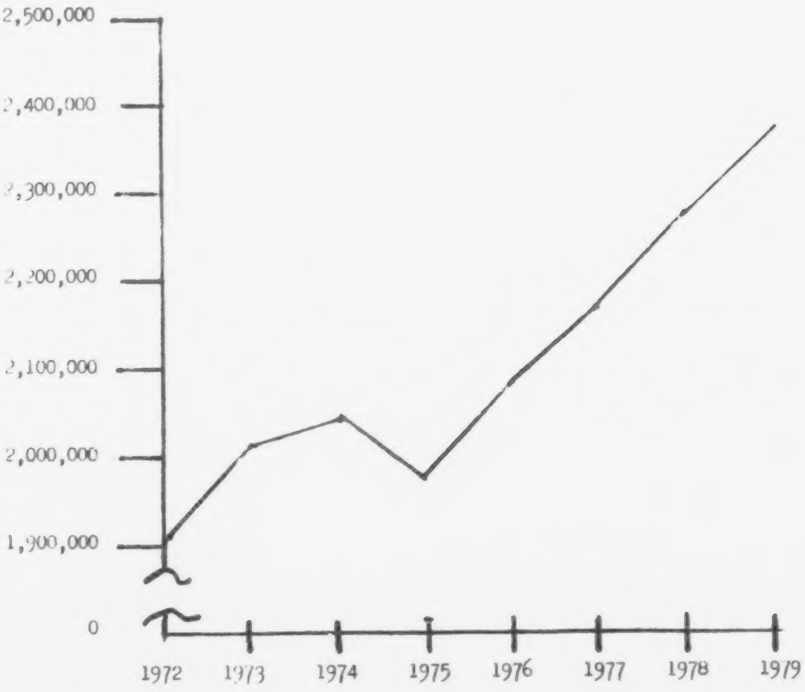


CHART C: TRADE WAGE AND SALARY EMPLOYMENT

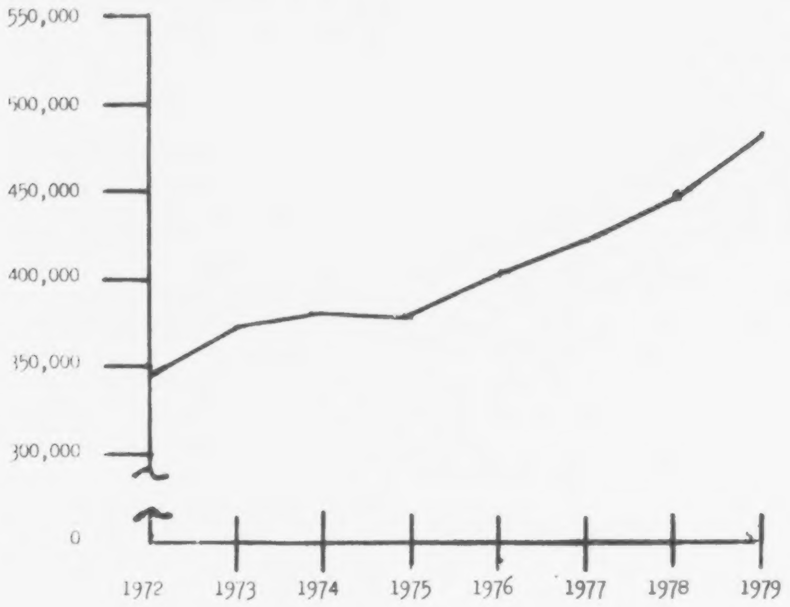
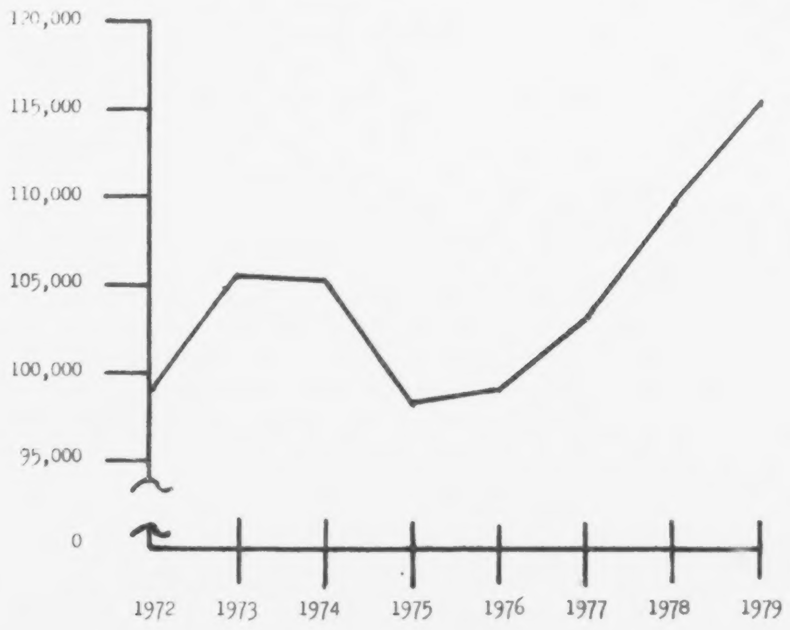


CHART D: TRANSPORTATION, COMMUNICATION, AND PUBLIC UTILITIES WAGE AND SALARY EMPLOYMENT



METHODOLOGY

A questionnaire was mailed to sampled trade, transportation, communication and public utility establishments in order to obtain occupational data. The total occupational employment for an industry was ten estimated from the reporting establishments.

Sample

The sample was drawn using procedures outlined in the OES Survey Operations Manual. Establishments were divided into different size classes by number of employees. All establishments with more than 250 employees were sampled. Establishments in each smaller size class were sampled in proportion to the employment in the size class; however, no establishment with fewer than four employees was sampled. Employment in these establishments was accounted for in the next larger size class. Each unit that was sampled was assigned a weight according to the ratio of units sampled in that size class. For example, when all units in a size class were sampled, the weight was one. When the units were sampled at a ratio of one out of four, the sampled unit was given a weight of four. The weighted establishment then represented itself and three other establishments.

Collection

Data collection began in August, 1979, and ended in January, 1980. Two follow-up mailings, personal visits, or telephone calls were made to those establishments whose responses are vital for statistical purposes, to those who had difficulty completing the questionnaire, or to those requiring clarification of the response.

Estimates

Data from the questionnaires were keypunched and loaded to tape. The tape was processed using the OES Batch Systems Programs to sort and screen the data. The estimating program sorted the data into size class cells. The weighted employment of each occupation in each cell was then estimated individually and summed across all cells in order to produce the final occupational employment estimate for each industry.

Error

Two types of errors, sampling and non-sampling, can affect the results of a survey. Sampling error is the difference between the estimates developed from data collected from a sample and the data collected from the universe from which the sample was drawn. Sampling error is measurable and is expressed as relative error. The relative error shown in this publication is such that the chances are two out of three that the results of comparable universal data collection would not differ by more than the percentage shown. Non-sampling error can arise from faulty questionnaire design, inability to collect necessary data, inaccuracy of data collected, and ineffective processing techniques. Non-sampling error cannot be measured.

Publication

After the data file had been procensed through the OES estimates programs, a computer printout was received which contained the estimated employment for each occupation, the relative error of the occupational estimate, the percent distribution of the occupational employment, the number of employees reported in each occupation, and the number of establishments which reported each occupation.

Industries were surveyed at the 3-digit SIC level; however, published data are at the 2-digit level of detail. The following exceptions were made to this format. The table for industry code 48, Communications, excludes three-digit code 483-Radio and Television Broadcasting, which is a separate table. The table for industry 49-Electric, Gas, and Sanitary Services, excludes industry 492 - Gas Production and Distribution. These exceptions were made to provide a better grouping of industries with compatible staffing patterns.

Occupational data were not published for industries when the industry employment was less than 1,000. The estimated employment for occupations was rounded to the nearest ten. The estimated employment was put in a residual category when the estimated employment for an occupation was less than 15 or less than 0.05 percent of the total group employment, when the relative error was more than 35 percent, or when an occupation was not reported by at least four establishments. Although they are not published here, the suppressed industry and occupation data will be included in the industry/occupation matrix.

Relative error is not applicable (N.A.) for residual categories, occupational group totals and total employment because it is not additive. The percent distribution was computed on the unrounded employment estimates; therefore, some occupations with the same published estimated employment may not have the same percent distribution. Six major occupational groups are listed for each industry. When there was no reported employment in an occupational group, the estimated employment is listed as zero. When the estimated employment for the occupational group was less than 15, the figure was not published; however, the existence of some employment in the group is indicated by a dash (--).

NOTE: Occasionally the sum of the occupations will not equal the Total Employment of the Occupational Category because of rounding.

SELECTED LIST OF RELEVANT PUBLICATIONS

The following is a partial list of publications that may be helpful to manpower planners. The publications are available from the Employment Security Commission of North Carolina, Bureau of Employment Security Research. A complete list of the Bureau's publciations may be found in their *Catalog of Publications and Releases*.

1. Results of OES surveys of *Occupational Employment* for industries in

    A. Trade, Transportation, Communication and Public Utilities
    B. Manufacturing
    C. Government
    D. Nonmanufacturing

2. *North Carolina Labor Force Estimates by County, Area, and State*. A labor force study in which monthly and annual average employment by major industry divisions, and unemployment are shown for the State, each county, and each multi-county labor area for the preceding calendar year.

3. *Preliminary Civilian Labor Force Estimates*. A monthly report showing preliminary labor force, total employment, total unemployment rates for the State and for each of the 100 counties.

4. *Active Job Applicants Registered for Work with Employment Security Commission Offices*, by applicant's county of residence. A special report prepared upon request depicting the number of actively registered job applicants available for work within a commuting radius of any designated town or industrial site in the State. Report includes a map of the area, total population of the area, and number of high school graduates entering the labor vorce.

5. *Area Labor Market Newsletters*. A monthly or bimonthly report for selected labor areas of the State which includes a narrative analysis and supporting statistical data on employment and unemployment trends in the area.

6. *Applicants and Nonagricultural Job Openings by Occupation*. A quarterly summary report of job applicants and job openings for selected occupations. Report shows number of applicants registered to date during fiscal year and number actively registered at close of month, with a female breakout. Also, shows nonfarm job openings received and filled during fiscal year and number unfilled for 30 days or more.

7. *North Carolina and Labor Market Area Annual Planning Reports*. An annual report which contains detailed labor market data including a definition of the area, economic development and area outlook; population and labor force characteristics and trends; employment developments and outlook by industry and occupation; recent trends in unemployment; estimates of need for manpower services; characteristics of the economically disadvantaged and nondisadvantaged; and barriers to employment of the economically disadvantaged. Contains supportive statistical charts, tables, and maps.

8. Employment Projections to 1985 (to be published July, 1981) for
   A. North Carolina
   B. Seven Standard Metropolitan Statistical Areas (SMSA)
   C. Eighteen Planning Regions

   Biennial reports that contain projections of future industrial and occupational employment needs to the year 1985 for the State and the SMSA's and projections of future occupational employment needs to the year 1985 for the Planning Regions. Reports include a narrative analysis and supportive statistical data in tables and charts.

9. State Labor Summary. A monthly report designed to provide an overview of statewide labor market conditions. Includes a narrative analysis and supporting statistical data on current employment and unemployment trends; labor supply and demand relationships; employment and training program activities; labor turnover; hours worked and wages paid.

10. 1980 Wage Rates in Selected Occupations. An annual report giving a statewide breakdown of wage rates by occupation and by industry. Also included are breakdowns by occupation for the eighteen planning regions. Rates are for production and non-production workers in manufacturing industries.

The following is an additional list of publications available through the U. S. Government Printing Office.

1. Standard Industrial Classification Manual, 1972. A classification of establishments by type of activity in which engaged; for the purposes of facilitating the collection, tabulation, presentation, and analysis of data relating to establishments; and for promoting uniformity and comparability in the presentation of statistical data collected by various agencies of the United States Government, State agencies, trade associations, and private research organizations.

2. Dictionary of Occupational Titles, Fourth Edition, 1977. The U. S. Department of Labor, Employment and Training Administration publication contains the country's most comprehensive job descriptions and related information on the 20,000 occupations identified in the United States. Known as the "DOT", the volume groups jobs in a classification structure based on interrelationships of tasks and requirements.

3. Guide for Occupational Exploration. This U. S. Department of Labor, Employment and Training Administration publication groups the thousands of occupations in the world of work by interests and by ability and traits required for successful performance. Descriptive information is provided for each work group to assist the individual in reviewing, understanding, and evaluating his or her own interests and potentials and relating them to pertinent fields of work.

4. Occupational Outlook Handbook, U. S. Department of Labor. A description of more than 850 occupations that include jobs about which young people are most interested in learning, occupations requiring long periods of education or training, and a number of small but growing fields of employment. Each escription contains a section on the nature of the work; industrial and/or geographic places of employment; training, other qualifications, and advancement; and prospective job opportunities on a National level.

LOCAL AND SUBURBAN TRANSIT AND INTERURBAN HIGHWAY PASSENGER TRANSPORTATION
(SIC 41)

This classification includes those establishments engaged in furnishing local and suburban passenger transportation as well as highway passenger transportation. Highway passenger terminals or maintenance facilities are also included in this major group.

The following table shows the percent distribution of establishments and employment by establishment size.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	86.0	28.5
20-49 employees	7.0	14.4
50-99 employees	4.8	24.6
100 or more employees	2.2	32.5

The following table lists the five specific occupations by employment size for this major group. These occupations accounted for nearly 70% of the total group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Bus Drivers	1,640	39.7
Taxi Drivers	610	14.8
Managers and Officers	200	4.7
Dispatchers	190	4.6
Ticket Agents	160	3.9

LOCAL AND INTERURBAN PASSENGER TRANSIT

(SIC 41)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	4,140	N.A.	100.0
Managers and Officers	200	5.1	4.7
Professional and Technical Workers	110	N.A.	2.7
Accountants and Auditors	20	26.8	0.6
Emergency Medical Technicians	90	25.5	2.1
Other Professional Workers	-	N.A.	-
Services	160	N.A.	3.9
Janitors, Porters, and Cleaners	100	16.6	2.4
Other Service Workers	60	19.9	1.5
Maintenance and Production Workers	3,070	N.A.	74.2
Supervisors	50	14.1	1.2
Mechanics and Repairers	260	N.A.	6.3
Mechanics, Automotive	130	15.2	3.2
Diesel Mechanics	90	6.1	2.1
Automotive Body Repairers	40	3.7	0.9
Bus Drivers	1,640	3.4	39.7
Taxi Drivers	610	4.0	14.8
Chauffeurs	50	31.0	1.3
School Bus Drivers	140	7.3	3.3
Vehicle Cleaners	130	2.9	3.2
Helpers, Trades	90	11.8	2.1
Fuel Pump Attendants	60	9.3	1.3
Other Laborers	40	N.A.	1.0
Clerical Workers	610	N.A.	14.7
General Office Clerks	110	10.2	2.6
Secretaries	40	7.0	0.8
Ticket Agents	160	17.0	3.9
Shipping and Receiving Clerks	40	15.2	1.0
Dispatchers, Vehicle, Service or Work	190	7.4	4.6
Other Office Clerical Workers	50	N.A.	1.2
Other Plant Clerical Workers	20	N.A.	0.5
Sales Workers	0	N.A.	0

1/ Detail may not add to totals because of rounding or data not published.

MOTOR FREIGHT TRANSPORTATION AND WAREHOUSING
(SIC 42)

This major group includes establishments furnishing local or long-distance trucking, or transfer services, or those engaged in the storage of farm products, furniture and other household goods, or commercial goods of any nature. The operation of terminal facilities for handling freight, with or without maintenance facilities, is also included.

Over 75% of the establishments have 19 or fewer employees; whereas, nearly 50% of the employment is in establishments with 100 or more employees. The following table shows the percent distribution of establishments and employment by establishment size in this group.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	79.2	18.1
20-49 employees	12.5	16.6
50-99 employees	4.9	16.0
100 or more employees	3.4	49.3

The following table lists the five specific occupations by employment size for this major group. These occupations had 51.9 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Tractor-Trailer Truck Drivers	14,930	32.8
Managers and Officers	2,980	6.5
Truck Drivers, Heavy	2,370	5.2
General Office Clerks	1,840	4.0
Diesel Mechanics	1,580	3.5

TRUCKING AND WAREHOUSING

(SIC 42)

MAY, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	45,590	N.A.	100.0
Managers and Officers	2,980	8.6	6.5
Professional and Technical Workers	460	N.A.	1.0
Engineers	50	25.9	0.1
Systems Analysts, EDP	20	24.7	0.1
Purchasing Agents and/or Buyers	30	20.8	0.1
Personnel and Labor Relations Specialists	80	21.4	0.2
Computer Programmers	50	21.0	0.1
Other Professional and Technical Workers	230	N.A.	0.5
Service Workers	300	N.A.	0.7
Janitors, Porters, and Cleaners	250	18.3	0.5
Other Service Workers	50	N.A.	0.1
Maintenance and Production Workers	32,170	N.A.	70.6
Supervisors	1,240	13.0	2.7
Mechanics and Repairers	2,230	N.A.	4.9
Automotive Body Repairers	70	31.1	0.2
Diesel Mechanics	1,580	13.3	3.5
Other Mechanics and Repairers	580	N.A.	1.3
Truck Drivers, Heavy	2,370	31.2	5.2
Tractor-Trailer Truck Drivers	14,930	9.4	32.8
Industrial Truck Operators	560	31.4	1.2
Helpers, Trades	70	31.8	0.2
Other Skilled Workers	20	N.A.	0.1
Other Semiskilled Workers	3,500	N.A.	7.7
Other Unskilled Workers	7,250	N.A.	15.9
Clerical Workers	9,200	N.A.	20.2
Supervisors	250	10.7	0.5
Bookkeeping/Billing Machine Operators	230	20.7	0.5
Computer Operators	100	31.7	0.2
Keypunch Operators	190	17.5	0.4
Accounting Clerks	190	16.8	0.4
Bookkeepers, Hand	270	29.6	0.6
Adjustment Clerks	180	17.4	0.4
Cashiers	50	31.8	0.1
General Office Clerks	1,840	15.6	4.0
Payroll/Timekeeping Clerks	140	16.1	0.3
Personnel Clerks	30	24.7	0.1
Secretaries	950	24.5	2.1
Switchboard Operators/Receptionists	60	38.6	0.1
Typists	90	32.8	0.2
Stock Clerks, Stockroom	1,030	23.6	2.3
Dispatchers, Vehicle, Service or Work	620	15.5	1.4
Rate Clerks, Freight	360	14.9	0.8
Other Office Clerical Workers	500	N.A.	1.1
Other Plant Clerical Workers	2,120	N.A.	4.7
Sales Workers	520	N.A.	1.1

1/ Detail may not add to totals because of rounding or data not published.

TRANSPORTATION BY AIR
(SIC 45)

This major group includes establishments engaged in furnishing domestic and foreign transportation by air as well as those which operate airports and flying fields and furnishing terminal services.

Over 75% of the establishments have 19 or fewer employees; whereas 75% of the employment is in establishments with 100 or more employees. The following table shows the percent distribution of establishments and employment by establishment size in this group.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	76.7	8.7
20-49 employees	12.1	8.1
50-99 employees	6.0	7.9
100 or more employees	5.2	75.3

The following table lists the five specific occupations by employment size for this major group. These occupations had 64.7 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Reservation Agents	1,600	27.8
Ticket Agents	740	12.9
Mechanics Aircrafts	600	10.5
Line-Service Attendants	420	7.3
Airplane Pilots	370	6.4

TRANSPORTATION BY AIR

(SIC 45)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	5,760	N.A.	100.0
Managers and Officers	300	10.1	5.3
Professional and Technical Workers	480	N.A.	8.3
Teachers, Vocational	50	28.3	0.9
Accountants and Auditors	20	12.6	0.4
Airplane Pilots	370	18.1	6.4
Other Professional and Technical Workers	40	N.A.	0.7
Services	310	N.A.	5.4
Supervisors	60	28.5	1.0
Janitors, Porters, and Cleaners	20	35.0	0.3
Flight Attendants	210	12.3	3.7
Other Service Workers	20	N.A.	0.3
Maintenance and Production Workers	1,360	N.A.	23.6
Supervisors	30	22.2	0.5
Mechanics and Repairers	700	N.A.	12.2
Mechanics, Aircraft	600	11.9	10.5
Mechanics, Automotive	20	20.2	0.4
Radio Mechanics	60	19.3	1.0
Other Mechanics and Repairers	20	N.A.	0.3
Vehicle Cleaners	130	5.4	2.3
Electricians	30	8.0	0.5
Line-Service Attendants	420	16.4	7.3
Other Laborers	50	N.A.	0.9
Clerical Workers	3,260	N.A.	56.6
Keypunch Operators	30	20.4	0.5
Accounting Clerks	120	19.1	2.0
Reservation Agents	1,600	12.3	27.8
General Office Workers	250	18.5	4.4
Payroll/Timekeeping Clerks	20	26.8	0.3
Secretaries	100	10.7	1.7
Ticket Agents	740	16.6	12.9
Typists	20	20.3	0.4
Stock Clerks, Stockroom	50	16.5	0.8
Dispatchers, Airplane	40	25.7	0.7
Other Office Clerical Workers	60	N.A.	1.0
Other Plant Clerical Workers	230	N.A.	4.1
Sales Workers	30	N.A.	0.5
Sales Representatives	30	24.9	0.5

1/ Detail may not add to totals because of rounding or data not published.

TRANSPORTATION SERVICES
(SIC 47)

This major group includes establishments furnishing services incidental to transportation, such as forwarding and packing services, and the arrangement of passenger and freight transportation.

Over 90 percent of the establishments have 19 or fewer employees; while nearly two-thirds of the employment is in the same size class. The following table shows the percent distribution of establishments and employment by establishment size in the transportation services group.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	92.1	63.3
20-49 employees	6.1	20.4
50-99 employees	1.8	16.3
100 or more employees	-	-

The following table lists the five specific occupations by employment size for this group. These occupations accounted for nearly 65% of the total group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Travel Agents	370	28.7
Managers and Officers	260	19.8
General Office Clerks	90	6.8
Truck Drivers	60	4.6
Bookkeepers, Hand	50	3.6

TRANSPORTATION SERVICES

(SIC 47)

APRIL, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	1,290	N.A.	100.0
Managers and Officers	260	6.6	19.8
Professional and Technical	390	N.A.	30.2
Travel Agents	370	7.8	28.7
Other Professional and Technical Workers	20	N.A.	1.6
Service Workers	-	N.A.	-
Maintenance and Production Workers	340	N.A.	26.4
Supervisors	20	32.5	1.7
Truck Drivers	60	28.1	4.6
Other Semiskilled Workers	70	N.A.	5.4
Other Laborers	190	12.1	14.9
Clerical Workers	260	N.A.	20.2
Bookkeeping/Billing Machine Operators	30	32.4	2.0
Bookkeepers, Hand	50	14.4	3.6
General Office Clerks	90	27.4	6.8
Secretaries	20	21.3	1.7
Shipping/Receiving Clerks	30	30.5	1.9
Other Clerical Workers	60	N.A.	3.1
Sales Workers	20	N.A.	1.5
Traffic Agents	20	28.3	1.5

1/ Detail may not add to totals because of rounding or data not published.

COMMUNICATION, EXCEPT RADIO AND TELEVISION BROADCASTING

(SIC 48, EXCEPT 483)

This major group includes establishments furnishing point-to-point communication services. Services for the exchange or recording of messages are also included.

Nearly 50 percent of the establishments have 19 or fewer employees; however, almost 90 percent of the employment is in establishments with 100 or more employees. The following table shows the percent distribution of establishments and employment by establishment size in this group.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	46.7	3.2
20-49 employees	18.6	5.4
50-99 employees	11.4	2.8
100 or more employees	23.3	88.6

The following table lists the five specific occupations by employment size for this major group. These occupations had 41.6 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Central Office Operators	3,220	13.6
Managers and Officers	2,160	9.1
Accounting Clerks	1,670	7.0
Central Office Repairers	1,430	6.1
Installer Repairers	1,390	5.9

COMMUNICATION, EXCEPT RADIO AND TELEVISION BROADCASTING
(SIC 48, Except 483)
June, 1979

Occupation	Estimated 1/ Employment	Relative Error	Percent 1/ Distribution
Total Employment	23,680	N.A.	100.0
Officers and Managers	2,160	6.9	9.1
Professional and Technical Workers	1,170	N.A.	5.0
Engineers	680	N.A.	2.9
Electrical and Electronic Engineers	660	10.2	2.8
Other Engineers	20	N.A.	0.1
Accountants and Auditors	40	30.4	0.2
Electrical and Electronic Technicians	160	8.3	0.7
Other Professional Workers	160	N.A.	0.7
Other Engineering Technicians	40	N.A.	0.2
Other Technical Workers	90	N.A.	0.4
Service Workers	470	N.A.	2.0
Supervisors	160	25.2	0.7
Janitors, Porters, and Cleaners	310	15.4	1.3
Maintenance and Production Workers	8,290	N.A.	35.0
Supervisors	550	14.1	2.3
Automotive Mechanics	90	20.3	0.4
Electronic Mechanics	30	30.3	0.2
Cable Repairers	590	13.6	2.5
Cable Splicers	830	9.4	3.5
Central Office Repairers	1,430	6.6	6.1
Frame Wirers	200	16.1	0.9
Installer Repairers	1,390	8.7	5.9
Line Installers - Repairers	610	15.7	2.6
Station Installers	1,220	13.6	5.2
Shop Repairers, Instrument	90	28.2	0.4
Telegraph Equipment Maintainers	120	29.7	0.5
Telegraph Plant Maintainers	200	26.9	0.8
Teletype Installers	100	34.6	0.4
Trouble Locators, Test Desk	470	10.5	2.0
Other Skilled Workers	230	N.A.	1.0
Other Semiskilled Workers	110	N.A.	0.5
Other Unskilled Workers	30	N.A.	0.1
Clerical Workers	11,160	N.A.	47.1
Supervisors	990	6.6	4.2
Computer Operators	80	22.7	0.4
Stenographers	240	13.5	1.0
Accounting Clerks	1,670	7.5	7.0
Bookkeepers, Hand	30	22.3	0.1
Cashiers	140	26.7	0.6
Collectors	30	10.7	0.1
General Office Clerks	1,230	13.1	5.2
Personnel Clerks	20	9.1	0.1
Private Branch Service Advisors	110	6.5	0.5

Occupation	Estimated 1/ Employment	Relative Error	Percent 1/ Distribution
Secretaries	260	14.1	1.1
Service Observers	40	9.2	0.2
Automobile Rapairers - Servicers	150	10.2	0.6
Statistical Clerks	80	9.7	0.3
Telegraph Operators	50	14.1	0.2
Central Office Operators	3,220	7.7	13.6
Customer Service Representatives	1,020	6.5	4.3
Production Clerks/Coordinators	510	8.3	2.2
Stock Clerks, Stockroom	200	10.9	0.8
Dispatchers, Vehicle, Service or Work	470	11.0	2.0
Other Office Machine Operators	50	N.A.	0.2
Other Office Clerical Workers	530	N.A.	2.2
Other Plant Clerical Workers	40	N.A.	0.2
Sales Workers	430	N.A.	1.8
Sales Representatives	400	9.2	1.7
Sales Clerks	30	22.9	0.1

1/ Detail may not add to totals because of rounding or data not published.

RADIO AND TELEVISION BROADCASTING
(SIC 483)

This major group includes stations primarily engaged in activities involving the dissemination by radio to the public and aural and visual programs.

Nearly 80 percent of the establishments have 19 or fewer employees; while more than a third of the employment is in the same size class. The following table shows the percent distribution of establishments and employment by establishment size in this group.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	77.8	39.3
20-49 employees	13.8	17.7
50-99 employees	4.6	13.8
100 or more employees	3.8	29.2

The following table lists the five specific occupations by employment size for this major group. These occupations accounted for 62 percent of the total group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Announcers	1,130	21.9
Managers and Officers	1,000	19.4
Sales Representatives	580	11.3
Broadcast Technicians	270	5.3
Electrical and Electronic Engineers	230	4.5

RADIO AND TELEVISION BROADCASTING

(SIC 483)

MAY, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	5,150	N.A.	100.0
Managers and Officers	1,000	6.0	19.4
Professional and Technical Workers	2,680	N.A.	51.8
Electrical and Electronic Engineers	230	10.6	4.5
Photographers	130	7.0	2.6
Television Camera Operators	150	10.2	2.9
Announcers	1,130	6.6	21.9
Broadcast News Analysts	120	18.4	2.4
Commercial Artists	50	19.4	0.9
Writers and/or Editors	90	15.3	1.7
Film Editors	50	11.7	1.0
Public-Relations Practitioners	30	12.9	0.5
Reporters and Correspondents	180	12.1	3.4
Technical Directors	80	12.6	1.6
Electrical and Electronic Technicians	30	23.4	0.5
Sound Recording and Reproduction Technicians	30	33.7	0.6
Broadcast Technicians	270	12.6	5.3
Other Professional Workers	50	N.A.	1.0
Other Technicians	60	N.A.	1.2
Services	80	N.A.	1.5
Janitors, Porters, and Cleaners	80	17.2	1.5
Maintenance and Production Workers	60	N.A.	1.2
Other Skilled Workers	20	N.A.	0.4
Other Laborers	40	N.A.	0.8
Clerical Workers	750	N.A.	14.5
Bookkeeping/Billing Machine Operators	60	23.2	1.2
Accounting Clerks	30	12.1	0.6
Bookkeepers, Hand	90	17.6	1.8
General Office Clerks	20	29.7	0.4
Payroll/Timekeeping Clerks	30	33.9	0.5
Receptionists	40	26.2	0.8
Secretaries	170	10.3	3.4
Switchboard Operators/Receptionists	30	4.9	0.6
Traffic Clerks	190	10.7	3.7
Typists	30	30.3	0.6
Other Office Clerical Workers	40	N.A.	0.8
Other Plant Clerical Workers	20	N.A.	0.3
Sales Workers	580	N.A.	11.3
Sale Representatives	580	7.4	11.3

1/ Detail may not add to totals because of rounding or data not published.

ELECTRIC, GAS, AND SANITARY SERVICES, EXCEPT GAS PRODUCTION

(SIC 49, EXCEPT 492)

This major group includes establishments engaged in the generation, transmission and/or distribution of electricity, steam or combination electric and gas, and other utility services. Gas production and distribution is not included in this report. Water and irrigation systems and sanitary systems engaged in the collection and disposal of garbage, sewage, and other wastes by means of destroying or processing materials, are also included.

Sixty-one percent of the establishments have 19 or fewer employees; whereas, over 75 percent of the employment is in establishments with 100 or more employees. The following table shows the percent distribution of establishments and employment by establishment size in this group.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	61.0	5.2
20-49 employees	19.4	9.2
50-99 employees	9.8	9.1
100 or more employees	9.8	76.5

The following table lists the five largest occupations by employment size for this major group. These occupations represent 24.1 percent of the total group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
General Office Clerks	1,360	7.0
Line Installers-Repairers	1,070	5.4
Managers and Officers	880	4.5
Maintenance and Production Supervisors	830	4.2
Electricians	590	3.0

ELECTRIC, GAS, AND SANITARY SERVICES
(Except Gas Production and Distribution)

(SIC 49 Except 492)

APRIL, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	19,590	N.A.	100.0
Managers and Officers	880	10.7	4.5
Professional and Technical Workers	3,350	N.A.	17.1
Engineers	710	N.A.	3.7
Civil Engineers	50	17.5	0.3
Electrical and Electronic Engineers	370	11.3	1.9
Industrial Engineers	60	14.8	0.3
Mechanical Engineers	150	24.4	0.8
Other Engineers	80	N.A.	0.4
Natural and Mathematical Scientists	60	13.9	0.3
Systems Analysts	160	19.4	0.8
Purchasing Agents and/or Buyers	70	24.3	0.4
Accountants and Auditors	120	23.7	0.6
Personnel and Labor Relations Specialists	100	12.0	0.5
Right-of-Way Agents	80	26.7	0.4
Home Economists	20	22.2	0.1
Computer Operators	50	18.7	0.2
Drafters	270	17.4	1.4
Electrical and Electronic Technicians	410	8.1	2.1
Surveyors	80	21.5	0.4
Estimators and Drafters, Utilities	270	12.7	1.4
Science Technicians	160	13.7	0.8
Other Professional Workers	160	N.A.	0.8
Other Engineering Technicians	60	N.A.	0.3
Other Technicians	570	N.A.	2.9
Service Workers	440	N.A.	2.3
Supervisors	230	14.2	1.2
Janitors, Porters, and Cleaners	170	14.5	0.9
Other Service Workers	40	N.A.	0.2
Maintenance and Production Workers	9,190	N.A.	46.9
Supervisors	830	10.5	4.2
Mechanics, Automotive	200	14.6	1.0
Diesel Mechanics	60	21.3	0.3
Electric-Meter Installers	280	23.2	1.4
Engineering-Equipment Mechanics	60	19.7	0.3
Hydroelectric-Machinery Mechanics	120	12.8	0.6
Mechanics, Maintenance	190	15.6	1.0
Power-Transformer Repairers	180	18.6	0.9
Treatment-Plant Mechanics	30	21.9	0.2
Truck Drivers	300	9.4	1.5
Carpenters	240	15.4	1.2
Crane, Derrick, and Hoist Operators	40	22.6	0.2
Electricians	590	8.7	3.0
Ground Workers, Utilities	240	23.2	1.2

ELECTRIC, GAS, AND SANITARY SERVICES
(Except Gas Production and Distribution)

(SIC 49 Except 492)

APRIL, 1979

Occupation	Estimated 1/ Employment	Relative Error	Percent 1/ Distribution
Heavy Equipment Operators	110	11.8	0.6
Inspectors	190	19.0	1.0
Line Installers - Repairers	1,070	9.1	5.4
Machinists	140	15.8	0.7
Maintenance Repairers, General Utilities	180	18.3	0.9
Helpers, Trades	520	11.4	2.6
Painters, Maintenance	90	15.2	0.5
Pipelayers	60	25.1	0.3
Refuse Collectors	300	11.7	1.5
Street - Light Repairers	160	19.4	0.8
Substation Operators	160	12.6	0.8
Trouble Shooters, Power Line	200	22.5	1.0
Water Treatment Plant Operators	30	18.9	0.1
Welders and Flamecutters	420	15.1	2.1
Surveyor Helpers	80	17.9	0.4
Other Mechanics and Repairers	130	N.A.	0.7
Other Skilled Workers	330	N.A.	1.7
Other Semiskilled Workers	820	N.A.	4.2
Other Unskilled Workers	840	N.A.	4.3
Clerical Workers	5,640	N.A.	28.9
Supervisors	300	9.8	1.5
Bookkeeping/Billing Machine Operators	110	25.9	0.6
Computer Operators	60	7.7	0.3
Keypunch Operators	140	9.1	0.7
Stenographers	360	8.4	1.8
Accounting Clerks	230	12.6	1.2
Bookkeepers, Hand	100	25.0	0.5
Cashiers	190	18.9	1.0
Collectors	180	20.1	0.9
File Clerks	90	13.7	0.5
General Office Clerks	1,360	6.7	7.0
Order Clerks	160	16.6	0.8
Payroll/Timekeeping Clerks	80	11.8	0.4
Personnel Clerks	70	15.2	0.4
Secretaries	300	9.0	1.5
Switchboard Operators/Receptionists	120	28.1	0.6
Typists	80	13.0	0.4
Customer Service Representatives	370	8.7	1.9
Meter Readers, Utilities	490	11.2	2.5
Shipping/receiving Clerks	130	9.7	0.7
Stock Clerks, Stockroom	240	10.6	1.2
Dispatchers, Vehicle, Service or Work	100	19.6	0.5
Other Office Machine Workers	110	N.A.	0.6
Other Office Clerical Workers	170	N.A.	0.9
Other Plant Clerical Workers	100	N.A.	0.5

ELECTRIC, GAS, AND SANITARY SERVICES
(Except Gas Production and Distribution)

(SIC 49 Except 492)

Occupation	Estimated 1/ Employment	Relative Error	Percent 1/ Distribution
Sales Workers	90	N.A.	0.5
Sales Representatives	60	11.4	0.3
Other Sales Workers	30	N.A.	0.2

1/ Detail may not add to totals because of rounding or data not published.

WHOLESALE TRADE - DURABLE GOODS
(SIC 50)

Establishments in this major group are primarily engaged in the wholesale distribution of durable goods. These include motor vehicles and parts, furniture, construction materials, hardware and electrical supplies, and machinery, equipment, and supplies.

The following table shows the percent distribution of establishments and employment by establishment size. Nearly 85 percent of the establishments employ 19 or fewer people; while one-third of the employment is in the same size class.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	84.4	34.4
20-49 employees	10.8	24.0
50-99 employees	3.2	16.8
100 or more employees	1.6	24.8

The following table lists the five specific occupations by employment size for this major group. These occupations accounted for 34 percent of the total group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Sales Representatives, Nontechnical	8,530	11.5
Sales Representatives, Technical	6,820	9.2
General Office Clerks	4,110	5.5
Stock Clerks, Stockroom	3,340	4.5
Managers, Wholesale	2,920	3.9

WHOLESALE TRADE - DURABLE GOODS

(SIC 50)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	75,260	N.A.	100.0
Managers and Officers	6,360	N.A.	8.5
Managers, Merchandise	2,140	10.4	2.9
Managers, Wholesale	2,910	9.6	3.9
Other Managers	1,310	N.A.	1.7
Professional and Technical Workers	6,170	N.A.	8.1
Engineers	1,040	N.A.	1.4
Systems Analysts, EDP	260	11.6	0.3
Buyers, Retail and/or Wholesale Trade	910	14.2	1.2
Accountants and Auditors	690	27.2	0.9
Computer Programmer	250	12.7	0.3
Other Professional and Technical Workers	3,020	N.A.	4.0
Service Workers	540	N.A.	0.8
Janitors, Porters, and Cleaners	500	21.9	0.7
Other Service Workers	40	N.A.	0.1
Maintenance and Production Workers	23,090	N.A.	30.7
Supervisors	1,590	11.9	2.1
Mechanics and Repairers	6,800	N.A.	9.1
Mechanics, Automotive	1,690	27.2	2.3
Other Mechanics and Repairers	5,110	N.A.	6.8
Truck Drivers	2,040	9.2	2.7
Carpenters	90	24.2	0.1
Delivery and Route Workers	1,950	11.6	2.6
Industrial Truck Operators	640	21.0	0.9
Maintenance Repairers, General Utility	2,200	31.6	2.9
Order Fillers	2,150	12.4	2.9
Fuel Pump Attendants	310	24.3	0.4
Other Skilled Workers	590	N.A.	0.8
Other Semiskilled Workers	2,940	N.A.	3.9
Other Laborers	1,790	N.A.	2.4
Clerical Workers	21,550	N.A.	29.0
Supervisors	70	19.9	0.1
Bookkeeping/Billing Machine Operators	1,120	15.1	1.5
Keypunch Operators	470	24.4	0.6
Accounting Clerks	1,540	25.9	2.1
Bookkeepers, Hand	1,500	12.7	2.0
Cashiers	330	19.5	0.4
General Office Clerks	4,150	9.3	5.6
Order Clerks	1,370	19.3	1.8
Receptionists	260	24.7	0.3
Secretaries	2,270	14.7	3.1
Switchboard Operators/Receptionists	380	21.9	0.5
Typists	550	24.8	0.7
Shipping Packers	1,390	15.6	1.9
Shipping/Receiving Clerks	2,050	17.6	2.8
Weighers, Record Keeping	110	23.6	0.1

WHOLESALE TRADE - DURABLE GOODS

(SIC 50)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Stock Clerks, Stockroom	3,340	14.9	4.5
Other Office Clerical Workers	610	N.A.	0.7
Other Plant Clerical Workers	40	N.A.	0.1
Sales Workers	17,550	N.A.	23.5
Sales Representatives, Nontechnical	8,560	11.9	11.5
Sales Representatives, Technical	6,790	10.4	9.1
Sales Clerks	1,810	18.4	2.4
Other Sales Workers	390	8.9	0.5

1/ Detail may not add to totals because of rounding or data not published.

WHOLESALE TRADE - NONDURABLE GOODS
(SIC 51)

Included in this major group are those establishments engaged in the wholesale distribution of nondurable goods. This classification includes paper, drug supplies, dry goods, farm products, chemicals, petroleum, and alcoholic beverages.

The class size of 19 or fewer employees contains over 80 percent of the establishments, in addition to accounting for the largest portion of the group's employment.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	83.7	34.5
20-49 employees	11.5	25.6
50-99 employees	3.0	15.4
100 or more employees	1.8	24.5

The following table lists the five specific occupations by employment size for this major group. These occupations accounted for 44 percent of the total group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Sales Representatives, Technical	7,730	15.4
Delivery and Route Workers	6,120	12.1
Truck Drivers	3,690	7.3
Sales Representatives, Nontechnical	2,380	4.7
Order Fillers	2,270	4.5

WHOLESALE TRADE - NONDURABLE GOODS

(SIC 51)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	50,340	N.A.	100.0
Managers and Officers	4,160	N.A.	8.3
Managers, Merchandise	1,260	9.2	2.5
Managers, Wholesale	2,250	7.7	4.5
Other Managers	650	N.A.	1.3
Professional and Technical Workers	1,690	N.A.	3.4
Engineers	140	N.A.	0.3
Systems Analysts, EDP	50	26.9	0.1
Buyers, Retail and/or Wholesale Trade	570	13.0	1.1
Accountants and Auditors	460	11.2	0.9
Computer Programmers	100	17.6	0.2
Other Professional and Technical Workers	170	N.A.	0.3
Other Technicians	200	N.A.	0.4
Service Workers	1,470	N.A.	2.9
Janitors, Porters, and Cleaners	590	32.4	1.2
Butchers and/or Meat Cutters	840	34.7	1.7
Other Food Service Workers	20	N.A.	-
Other Service Workers	20	N.A.	-
Maintenance and Production Workers	19,450	N.A.	38.6
Supervisors	860	12.1	1.7
Mechanics and Repairers	400	N.A.	0.8
Mechanics, Automotive	240	28.9	0.5
Other Mechanics and Repairers	160	N.A.	0.3
Truck Drivers	3,690	10.4	7.3
Delivery and Route Workers	6,120	8.6	12.1
Industrial Truck Operators	800	12.8	1.6
Maintenance Repairers, General Utility	870	19.5	1.7
Order Fillers	2,270	14.3	4.5
Other Skilled Workers	90	N.A.	0.2
Other Semiskilled Workers	880	N.A.	1.7
Other Laborers	3,470	N.A.	6.9
Clerical Workers	12,610	N.A.	25.0
Bookkeeping/Billing Machine Operators	760	12.0	1.5
Keypunch Operators	440	13.6	0.9
Accounting Clerks	690	15.6	1.4
Bookkeepers, Hand	970	9.6	1.9
Cashiers	290	18.7	0.6
General Office Clerks	2,000	7.3	4.0
Order Clerks	670	16.6	1.3
Receptionists	130	20.0	0.3
Secretaries	1,300	10.3	2.6
Switchboard Operators/Receptionists	180	13.0	0.4
Typists	250	16.7	0.5
Shipping Packers	1,940	16.8	3.8
Shipping/Receiving Clerks	1,140	11.9	2.3

WHOLESALE TRADE - NONDURABLE GOODS

(SIC 51)

JUNE, 1979

Occupation	Estimated1/ Employment	Relative Error %	Percent1/ Distribution
Weighers, Record Keeping	180	21.2	0.4
Stock Clerks, Stockroom	1,460	12.2	2.9
Other Office Clerical Workers	190	N.A.	0.3
Other Plant Clerical Workers	20	N.A.	-
Sales Workers	10,990	N.A.	21.8
Sales Representatives, Nontechnical	2,380	17.8	4.7
Sales Representatives, Technical	7,730	12.0	15.4
Sales Clerks	880	25.3	1.7
Other Sales Workers	-	-	-

1/ Detail may not add to totals because of rounding or data not published.

BUILDING MATERIALS, HARDWARE, GARDEN SUPPLY, AND MOBILE HOME DEALERS

(SIC 52)

This major group includes establishments primarily engaged in selling lumber and other building material; paint; glass; wallpaper; hardware; garden supplies; and mobile homes. Establishments whose sales are mostly to contractors are considered "retail" and are included in this group.

The following table shows the percent distribution of establishments and employment by establishment size in this group. Nearly 90 percent of the establishments employ 19 or fewer people. These firms employ more than 50 percent of the workers in this industry.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	89.6	53.1
20-49 employees	8.4	24.9
50-99 employees	1.6	11.1
100 or more employees	.4	10.9

The following table lists the five specific occupations by employment size for this major group. These occupations had 43.4 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Sales Clerk	2,310	12.0
Sales Representatives, Technical	1,910	9.9
Managers, Stores	1,630	8.5
Truck Drivers	1,570	8.2
Bookkeepers, Hand	920	4.8

BUILDING MATERIALS AND GARDEN SUPPLIES

(SIC 52)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	19,230	N.A.	100.0
Managers and Officers	2,130	N.A.	11.1
Managers, Merchandise	470	10.6	2.5
Managers, Store	1,630	5.4	8.5
Other Managers	30	N.A.	0.1
Professional and Technical Workers	430	N.A.	2.2
Buyers, Retail and/or Wholesale Trade	310	14.5	1.6
Accountants and Auditors	120	20.7	0.6
Other Professional and Technical Workers	-	N.A.	-
Service Workers	300	N.A.	1.6
Janitors, Porters, and Cleaners	300	14.2	1.6
Other Service Workers	-	N.A.	-
Maintenance and Production Workers	7,660	N.A.	39.8
Supervisors	380	20.4	2.0
Mechanics and Repairers	190	N.A.	1.0
Mechanics, Automotive	80	24.6	0.4
Other Mechanics and Repairers	110	N.A.	0.6
Farm Equipment Mechanics	160	32.5	0.8
Truck Drivers	1,570	10.3	8.2
Carpenters	400	31.9	2.1
Delivery and Route Workers	610	15.6	3.2
Glaziers	320	28.3	1.7
Industrial Truck Operators	380	15.1	2.0
Maintenance Repairers, General Utility	220	24.0	1.1
Stock Clerks, Sales Floor	600	12.5	3.1
Wood Machinists	290	24.4	1.5
Mobile Home Repairers	170	19.8	0.9
Mobile Home Set-Up Operators	300	11.7	1.6
Other Skilled Workers	230	N.A.	1.2
Other Semiskilled Workers	610	N.A.	3.2
Other Laborers	1,230	N.A.	6.4
Clerical Workers	3,710	N.A.	19.3
Bookkeepers, Hand	920	6.8	4.8
Cashiers	320	13.8	1.7
General Office Clerks	860	8.7	4.5
Secretaries	420	9.7	2.2
Shipping/Receiving Clerks	290	15.7	1.5
Stock Clerks, Stockroom	830	16.1	4.3
Other Office Clerical Workers	70	N.A.	0.3
Other Plant Clerical Workers	-	N.A.	-
Sales Workers	5,000	N.A.	26.0
Sales Representatives, Nontechnical	780	15.1	4.1
Sales Representatives, Technical	1,910	9.5	9.9
Sales Clerks	2,310	8.6	12.0

1/ Detail may not add to totals because of rounding or data not published.

GENERAL MERCHANDISE STORES
(SIC 53)

This category includes retail stores commonly known as department and variety stores, general stores, etc. Establishments in this major group include stores which sell a variety of merchandise such as dry goods, apparel, small wares, and others.

The smallest class size contains 67 percent of the firms in this type of establishment while the class size of 100 or more employees contains 61 percent of the employment. The following table shows the percent distribution of establishments and employment by establishment size.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	67.4	10.1
20-49 employees	12.4	9.5
50-99 employees	10.3	18.9
100 or more employees	9.9	61.5

The following table lists the five specific occupations by employment size for this major group. These occupations had 58.1 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Sales Clerk	20,500	37.4
Cashiers	4,240	7.7
Sales Representatives, Technical	2,900	5.3
General Office Clerks	2,170	3.9
Managers, Store	2,090	3.8

GENERAL MERCHANDISE STORES
(SIC 53)
JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	54,750	N.A.	100.0
Managers and Officers	4,180	N.A.	7.6
Managers, Merchandise	850	11.5	1.6
Managers, Store	2,060	6.1	3.8
Other Managers and Officers	1,270	N.A.	2.3
Professional and Technical Workers	1,760	N.A.	3.1
Buyers, Retail and/or Wholesale Trade	1,090	14.7	2.0
Accountants and Auditors	130	34.0	0.2
Commercial Artists	100	14.7	0.2
Personnel and Labor Relations Specialists	190	7.2	0.3
Designers	40	22.1	0.1
Other Professional and Technical Workers	210	N.A.	0.2
Service Workers	3,030	N.A.	5.5
Supervisors	70	27.9	0.1
Janitors, Porters, and Cleaners	1,010	6.0	1.8
Guards and Doorkeepers	150	15.8	0.3
Kitchen Helpers	60	22.6	0.1
Waiters and Waitresses	530	11.4	1.0
Counter Attendants	240	20.7	0.4
Cooks, Short Order	180	19.3	0.3
Cooks, Restaurant	50	21.2	0.1
Cosmetologists	140	22.1	0.3
Checkers, Fitting Room	160	17.4	0.3
Store Detectives	380	12.7	0.7
Other Service Workers	90	N.A.	0.2
Maintenance and Production Workers	5,980	N.A.	11.0
Supervisors	270	15.5	0.5
Mechanics and Repairers	1,180	N.A.	2.2
Mechanics, Automotive	380	11.1	0.7
Mechanics, Maintenance	90	14.2	0.2
Other Mechanics and Repairers	710	N.A.	1.3
Truck Drivers	340	11.1	0.6
Carpenters	50	3.5	0.1
Delivery and Route Workers	80	31.1	0.2
Merchandise Displayers	180	9.2	0.3
Industrial Truck Operators	60	23.0	0.1
Maintenance Repairers, General Utility	130	12.1	0.2
Sewers, Custom	200	20.4	0.4
Alteration Tailors	250	17.0	0.5
Fuel Pump Attendants	150	11.4	0.3
Tire Changers	280	11.0	0.5
Household - Appliance Installers	30	24.0	0.1
Stock Clerks, Sales Floor	1,940	16.6	3.5
Other Skilled Workers	60	N.A.	0.1
Other Semiskilled Workers	290	N.A.	0.5
Other Laborers	490	N.A.	0.9

GENERAL MERCHANDISE STORES

(SIC 53)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Clerical Workers	15,370	N.A.	28.1
Supervisors	320	11.1	0.6
Bookkeeping/Billing Machine Operators	60	23.0	0.1
Computer Operators	30	23.6	0.1
Keypunch Operators	110	20.1	0.2
Peripheral EDP Equipment Operators	50	19.8	0.1
Accounting Clerks	440	11.6	0.8
Bookkeepers, Hand	350	10.5	0.6
Adjustment Clerks	420	18.0	0.8
Cashiers	4,230	6.7	7.7
File Clerks	80	29.5	0.2
General Office Clerks	2,140	7.7	3.9
Credit Authorizers	290	14.5	0.5
Order Clerks	250	19.8	0.4
Payroll/Timekeeping Clerks	160	17.1	0.3
Personnel Clerks	90	11.4	0.2
Secretaries	540	17.5	1.0
Service Clerks	550	17.0	1.0
Switchboard Operators	320	7.7	0.6
Typists	100	35.0	0.2
Shipping Packers	340	16.0	0.6
Shipping/Receiving Clerks	880	8.0	1.6
Stock Clerks, Stockroom	1,660	7.2	3.0
Marking Clerks	1,020	15.9	1.9
Other Office Clerical Workers	940	N.A.	1.7
Sales Workers	24,490	N.A.	44.6
Supervisors	580	14.9	1.0
Sales Representatives, Nontechnical	320	32.1	0.6
Sales Representatives, Technical	2,930	16.1	5.3
Sales Clerks	20,400	3.6	37.2
Other Sales Workers	260	N.A.	0.5

1/ Detail may not add to totals because of rounding or data not published.

FOOD STORES
(SIC 54)

This major group includes retail stores engaged in selling food for home use only. Establishments selling food for on premises consumption are not included in this category. Retail grocery, meat and fish markets, fruit stores, confectionaries, and bakeries are examples of this group.

The following table shows the percent distribution of establishments and employment by establishment size of retail food stores.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	83.9	26.1
20-49 employees	10.7	22.0
50-99 employees	3.1	14.8
100 or more employees	2.3	37.1

The following table lists the largest specific occupations by employment size for this major group. These occupations accounted for nearly 80 percent of the total group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Cashiers	10,730	24.2
Stock Clerks, Sales Floor	7,710	17.4
Baggers	6,200	14.0
Sales Clerks	3,860	8.7
Managers, Store	3,450	7.8
Butchers and/or Meatcutters	3,060	6.9

FOOD STORES
(SIC 54)
JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	44,330	N.A.	100.0
Managers and Officers	3,730	N.A.	8.4
Managers, Store	3,450	5.6	7.8
Other Managers	280	N.A.	0.6
Professional and Technical Workers	410	N.A.	0.9
Buyers, Retail and/or Wholesale Trade	340	27.3	0.8
Accountants and Auditors	30	20.7	0.1
Other Professional and Technical Workers	40	N.A.	0.1
Service Workers	4,050	N.A.	9.1
Janitors, Porters, and Cleaners	300	16.7	0.7
Butchers and/or Meatcutters	3,060	5.6	6.9
Other Service Workers	690	N.A.	1.6
Maintenance and Production Workers	17,730	N.A.	40.0
Supervisors	460	20.7	1.0
Mechanics	90	N.A.	0.2
Truck Drivers	220	18.0	0.5
Delivery and Route Workers	210	30.1	0.5
Production Packagers	970	17.1	2.2
Baggers	6,200	6.6	14.0
Stock Clerks, Sales Floor	7,710	6.6	17.4
Bakers	990	22.6	2.2
Doughnut Makers/Machine Operators	380	22.5	0.9
Other Semiskilled Workers	470	N.A.	1.1
Other Laborers	30	23.3	0.1
Clerical Workers	14,470	N.A.	32.6
Bookkeepers, Hand	880	8.5	2.0
Cashiers	10,730	4.5	24.2
General Office Clerks	640	17.8	1.5
Secretaries	320	29.0	0.7
Stock Clerks, Stockroom	1,720	18.9	3.9
Other Office Clerical Workers	120	N.A.	0.3
Other Plant Clerical Workers	60	N.A.	0.1
Sales Workers	3,940	N.A.	8.9
Sales Representatives, Nontechnical	80	30.5	0.2
Sales Clerks	3,860	16.0	8.7

1/ Detail may not add to totals because of rounding or data not published.

AUTOMOTIVE DEALERS AND GASOLINE SERVICE STATIONS
(SIC 55)

This major group includes establishments selling new, used, or new and used automobiles and recreation equipment, gasoline stations and motorcycle dealers. Boat and utility trailer dealers are also included.

Almost 90 percent of the establishment have 19 or fewer employees and nearly one-half of the employment is in this class size. The percent distribution of establishments and employment size in this major group are shown in the following table.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	89.9	48.3
20-49 employees	7.6	27.3
50-99 employees	2.1	17.4
100 or more employees	.4	7.0

The following table lists the largest specific occupations by employment size for this major group. These occupations had 60 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Mechanics, Automotive	7,660	16.9
Sales Representatives, Technical	6,110	13.5
Fuel Pump Attendants	5,570	12.3
Managers, Store	4,420	9.7
Tire Changers	1,740	3.8
Bookkeepers, Hand	1,740	3.8

AUTOMOTIVE DEALERS AND SERVICE STATIONS

(SIC 55)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	45,530	N.A.	100.0
Managers and Officers	7,300	N.A.	16.0
Managers, Store	4,320	6.0	9.5
Managers, Automobile Service Dept.	1,560	6.8	3.4
Managers, Automotive Parts Dept.	1,050	8.5	2.3
Other Managers	370	26.7	0.8
Professional and Technical Workers	490	N.A.	1.1
Accountants and Auditors	420	18.5	0.9
Other Technicians	70	12.6	0.2
Service Workers	870	N.A.	1.9
Janitors, Porters, and Cleaners	640	21.5	1.4
Other Service Workers	230	N.A.	0.5
Maintenance and Production Workers	22,110	N.A.	48.8
Supervisors	390	20.1	0.9
Mechanics and Repairers	10,110	N.A.	22.3
Mechanics, Automotive	7,840	4.8	17.3
Body Repairers, Automotive	1,630	10.3	3.6
Marine Mechanics and/or Repairers	50	23.1	0.1
Motorboat Mechanics	240	8.2	0.5
Other Mechanics and Repairers	350	N.A.	0.8
Automobile Repairers - Servicers	270	20.3	0.6
Cleaners, Vehicle	1,490	9.7	3.3
Delivery and Route Workers	250	27.7	0.6
Helpers, Trades	700	23.1	1.5
Painters, Automotive	380	24.3	0.8
Tire Fabricators	310	33.1	0.7
Fuel Pump Attendants	5,620	6.6	12.4
Tire Changers	1,740	16.5	3.8
Other Skilled Workers	30	N.A.	0.1
Other Semiskilled Workers	700	N.A.	1.5
Other Laborers	120	N.A.	0.3
Clerical Workers	7,360	N.A.	16.2
Accounting Clerks	530	17.7	1.2
Bookkeepers, Hand	1,780	8.5	3.9
General Office Clerks	1,420	12.0	3.1
Secretaries	620	17.7	1.4
Switchboard Operators/Receptionists	220	18.0	0.5
Stock Clerks, Stockroom	1,060	27.3	2.3
Other Office Clerical Workers	1,730	N.A.	3.8
Sales Workers	7,400	N.A.	16.3
Sales Representatives, Technical	6,110	5.4	13.5
Sales Clerks	840	21.6	1.8
Other Sales Workers	450	N.A.	1.0

1/ Detail may not add to totals because of rounding or data not published.

APPAREL AND ACCESSORY STORES
(SIC 56)

This major group includes retail establishments primarily engaged in selling new clothing, shoes, hats, and other articles for personal wear. Furriers and custom tailors that have inventory on hand are included in this group.

The following table shows the percent distribution of establishments and employment by establishment size in the apparel and accessory stores group. 91 percent of the establishments have less than 20 employees, and 52 percent of the employment is in the same class size.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	91.1	52.6
20-49 employees	6.5	21.3
50-99 employees	1.7	13.6
100 or more employees	.7	12.5

The following table lists the five specific occupations by employment size for this major group. These occupations accounted for nearly 80 percent of the total group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Sales Clerks	10,270	45.1
Managers, Store	2,760	12.1
Sales Representatives, Technical	2,690	11.8
Cashiers	1,000	4.4
Alteration Tailors	990	4.4

APPAREL AND ACCESSORY STORES

(SIC 56)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	22,800	N.A.	100.0
Managers and Officers	3,280	N.A.	14.4
Managers, Merchandise	380	13.5	1.7
Managers, Store	2,760	6.4	12.1
Other Managers	140	N.A.	0.6
Professional and Technical Workers	570	N.A.	2.5
Buyers, Retail and/or Wholesale Trade	550	18.4	2.4
Other Professional and Technical Workers	20	N.A.	0.1
Service Workers	290	N.A.	1.3
Janitors, Porters, and Cleaners	190	21.7	0.8
Other Service Workers	100	N.A.	0.4
Maintenance and Production Workers	2,130	N.A.	9.3
Truck Drivers	20	30.0	0.1
Merchandise Displayers	50	26.6	0.2
Alteration Tailors	990	12.2	4.4
Stock Clerks, Sales Floor	880	31.0	3.9
Other Skilled Workers	100	N.A.	0.4
Other Semiskilled Workers	60	N.A.	0.3
Other Laborers	30	N.A.	0.1
Clerical Workers	3,280	N.A.	14.4
Bookkeepers, Hand	600	12.7	2.6
Cashiers	1,000	14.3	4.4
General Office Clerks	580	21.4	2.5
Order Clerks	60	25.6	0.3
Secretaries	170	25.1	0.7
Shipping/Receiving Clerks	240	27.4	1.0
Stock Clerks, Stockroom	530	32.8	2.3
Other Office Clerical Workers	100	N.A.	0.4
Sales Workers	13,210	N.A.	57.9
Sales Representatives, Nontechnical	250	33.3	1.1
Sales Representatives, Technical	2,690	17.8	11.8
Sales Clerks	10,270	5.6	45.1

1/ Detail may not add to totals because of rounding or data not published.

FURNITURE, HOME FURNISHINGS, AND EQUIPMENT STORES
(SIC 57)

Establishments in this group are primarily retail stores selling home furnishings such as furniture, draperies, electrical and gas applicances. Antique and used furniture dealers are not included in this group.

Nearly 95 percent of the establishments are classified in the 19 or fewer employees group. The following table shows percent distribution of establishments and employment by establishment size.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	94.4	61.0
20-49 employees	4.6	17.0
50-99 employees	0.7	6.1
100 or more employees	0.3	15.9

The following table lists the five specific occupations by employment size for this major group. These occupations accounted for nearly 50 percent of the total group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Sales Representatives, Technical	3,270	17.0
Managers, Store	2,110	10.9
Delivery and Route Workers	1,490	7.7
Sales Representatives, Nontechnical	1,360	7.0
General Office Clerks	1,290	6.7

FURNITURE AND HOME FURNISHINGS STORES

(SIC 57)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	19,050	N.A.	100.0
Managers and Officers	2,430	N.A.	13.0
Managers, Merchandise	380	22.0	2.0
Managers, Store	2,010	5.7	10.8
Other Managers	40	23.2	0.2
Professional and Technical Workers	660	N.A.	3.5
Buyers, Retail and/or Wholesale Trade	300	22.0	1.6
Other Professional and Technical Workers	360	N.A.	1.9
Service Workers	330	N.A.	1.6
Janitors, Porters, and Cleaners	330	20.0	1.6
Maintenance and Production Workers	6,090	N.A.	31.1
Mechanics and Repairers	1,130	N.A.	6.1
Refrigerator/Air Conditioning Mechanics	270	16.4	1.5
Television Servicers	590	16.5	3.2
Gas and Electric Appliance Mechanics	250	22.1	1.3
Other Mechanics and Repairers	20	N.A.	0.1
Carpet Cutters	720	33.8	3.9
Delivery and Route Workers	1,400	11.8	7.5
Household Appliance Installers	370	27.4	2.0
Other Skilled Workers	830	N.A.	4.3
Other Semiskilled Workers	840	N.A.	4.4
Other Laborers	560	N.A.	2.9
Clerical Workers	3,970	N.A.	20.9
Supervisors	330	20.2	1.6
Accounting Clerks	180	17.8	1.0
Bookkeepers, Hand	650	12.1	3.5
Cashiers	450	22.2	2.4
General Office Clerks	1,250	11.0	6.7
Secretaries	210	21.0	1.1
Other Office Clerical Workers	260	N.A.	1.4
Other Plant Clerical Workers	640	N.A.	3.3
Sales Workers	5,570	N.A.	29.9
Sales Representatives, Nontechnical	1,300	18.8	7.0
Sales Representatives, Technical	3,260	9.5	17.5
Sales Clerks	1,010	16.0	5.4

1/ Detail may not add to totals because of rounding or data not published.

EATING AND DRINKING PLACES
(SIC 58)

The establishments in this major grouping are primarily engaged in the retail selling of food and drinks for on the premises consumption. Establishments that are operated as a subordinate service facility of another industry are not included.

The following table shows the percent distribution of establishments and employment by establishment size.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	73.4	28.7
20-49 employees	20.6	36.0
50-99 employees	4.3	16.2
100 or more employees	1.7	19.1

The following table lists the largest specific occupations by employment size for this major group. These occupations had 38.7 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Waiters and/or Waitresses	20,910	21.5
Kitchen Helpers	8,080	8.3
Cooks, Restaurant	4,960	5.1
Managers, Restaurant	3,730	3.8

EATING AND DRINKING PLACES

(SIC 58)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	97,220	N.A.	100.0
Managers and Officers	5,850	N.A.	6.0
Managers, Restaurant	3,730	22.2	3.8
Other Managers and Officers	2,120	N.A.	2.2
Professional and Technical Workers	210	N.A.	0.2
Service Workers	80,630	N.A.	82.9
Kitchen Helpers	8,080	24.5	8.3
Waiters or Waitresses	20,910	26.0	21.5
Cooks, Restaurant	4,960	25.1	5.1
Other Food Service Workers	43,440	N.A.	44.7
Other Service Workers	3,240	N.A.	3.3
Maintenance and Production Workers	1,460	N.A.	1.5
Clerical Workers	8,790	N.A.	9.0
Sales Workers	280	N.A.	0.3

1/ Detail may not add to totals because of rounding or data not published.

MISCELLANEOUS RETAIL
(SIC 59)

This major group includes establishments not previously classified. Drug and liquor stores, florists, cigar stores, and fuel and ice dealers are included within this classification.

The smallest class size contains 92 percent of the establishments as well as 59 percent of the employment as indicated in the table below. The table shows the percent distribution of the establishments and employment by establishment size.

Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	92.9	56.0
20-49 employees	5.3	18.0
50-99 employees	1.3	10.9
100 or more employees	0.5	15.1

The following table lists the five specific occupations by employment size for this major group. These occupations accounted for nearly 50 percent of the total group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Sales Clerks	9,000	19.3
Cashiers	3,920	8.4
Managers, Store	3,890	8.3
Delivery and Route Workers	3,320	7.1
Sales Representatives, Technical	3,110	6.7

MISCELLANEOUS RETAIL

(SIC 59)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Total Employment	46,390	N.A.	100.0
Managers and Officers	5,040	N.A.	10.8
Managers, Merchandise	980	11.0	2.1
Managers, Store	3,840	4.5	8.2
Other Managers	220	18.6	0.5
Professional and Technical Workers	4,930	N.A.	10.6
Buyers, Retail and/or Wholesale Trade	630	15.9	1.4
Accountants and Auditors	200	20.7	0.4
Pharmacists	2,130	7.2	4.6
Designers	1,790	12.0	3.8
Other Professional and Technical Workers	180	N.A.	0.2
Service Workers	3,400	N.A.	7.3
Janitors, Porters, and Cleaners	700	32.8	1.5
Guards and Doorkeepers	30	34.5	0.1
Counter Attendants	790	25.9	1.7
Cooks, Short Order	340	28.0	0.7
Other Food Service Workers	1,380	N.A.	3.0
Other Service Workers	160	N.A.	0.3
Maintenance and Production Workers	9,830	N.A.	20.9
Supervisors	110	25.7	0.2
Mechanics and Repairers	1,850	N.A.	3.9
Mechanics, Automotive	240	13.0	0.5
Vending Machine Servicers/Repairers	800	22.8	1.7
Gas and Electric Appliance Repairers	470	10.3	1.0
Other Mechanics and Repairers	340	N.A.	0.7
Truck Drivers	620	13.0	1.3
Delivery and Route Workers	3,340	10.3	7.2
Industrial Truck Operators	70	40.4	0.1
Jewelers and/or Silversmiths	270	26.6	0.6
Oil-Burner - Installers	190	17.3	0.4
Order Fillers	510	25.3	1.1
Watchmakers	120	31.1	0.2
Furniture Finishers	50	29.6	0.1
Other Skilled Workers	280	N.A.	0.6
Other Semiskilled Workers	1,580	N.A.	3.4
Other Laborers	840	N.A.	1.8
Clerical Workers	9,920	N.A.	21.5
Bookkeeping/Billing Machine Operators	330	14.7	0.7
Keypunch Operators	170	21.3	0.4
Accounting Clerks	540	24.6	1.2
Bookkeepers, Hand	970	9.8	2.1
Cashiers	3,370	11.3	7.2
General Office Clerks	1,500	9.7	3.2
Payroll/Timekeeping Clerks	30	16.6	0.1
Receptionists	90	28.4	0.2
Secretaries	350	13.2	0.7

MISCELLANEOUS RETAIL

(SIC 59)

JUNE, 1979

Occupation	Estimated 1/ Employment	Relative Error %	Percent 1/ Distribution
Typists	130	31.9	0.3
Switchboard Operators/Receptionists	50	24.1	0.1
Shipping/Receiving Clerks	400	15.5	1.0
Stock Clerks, Stockroom	620	24.8	1.3
Marking Clerks	130	34.3	0.3
Other Office Machine Operators	140	N.A.	0.3
Other Office Clerical Workers	1,020	N.A.	2.2
Other Plant Clerical Workers	80	N.A.	0.2
Sales Workers	13,290	N.A.	28.4
Sales Representatives, Nontechnical	810	28.8	1.7
Sales Representatives, Technical	3,090	15.9	6.6
Sales Clerks	9,320	5.8	20.0
Other Sales Workers	70	35.5	0.1

1/ Detail may not add to totals because of rounding or data not published.

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OCCUPATIONAL EMPLOYMENT

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Labor Market
Information

OCCUPATIONAL EMPLOYMENT IN GOVERNMENT AND EDUCATION

NORTH CAROLINA
1979

EMPLOYMENT SECURITY COMMISSION
OF NORTH CAROLINA

Glenn R. Jernigan, Chairman

This is a cooperative program involving the Employment Security Commission of North Carolina, the Bureau of Labor Statistics, and the Employment and Training Administration of the U.S. Department of Labor.

MARCH, 1982

A Labor Market Information Publication

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INTRODUCTION

The manpower planning process has increased the need for occupational employment information. The Employment and Training Administration and the Bureau of Labor Statistics, of the U.S. Department of Labor, have developed the Occupational Employment Statistics (OES) Program to help meet these manpower planning needs. The OES Program has three main elements:

1. Periodic surveys of approximately 2,000 occupations by industry
2. The National/State Industry Occupation Employment Matrix
3. State and area manpower projections by industry and occupation

This report, which covers occupational employment in government and education, is the second report based on a survey of government and the first based on a survey of education. According to the Standard Industrial Classification Manual, 1972, government includes Federal, State, and local government activities. This includes the legislative, judicial, and administrative functions, as well as government owned and operated business enterprises. Education includes establishments furnishing formal academic or technical courses, correspondence schools, commercial and trade schools, and libraries.

The Office of Personnel Management of the U.S. Government and the North Carolina Office of State Personnel each provided a universal listing of the occupational employment in Federal and State government in North Carolina. Selected counties, cities, and special districts throughout North Carolina provided data on local government staffing patterns. Employment data were provided by private elementary and secondary schools; however, no data for public schools could be obtained. Both state-supported and private institutions of higher learning provided information for the survey.

METHODOLOGY

Data for this report were obtained by two methods. Universal listings were used to obtain occupational employment for both Federal and State government. A questionnaire was used to obtain occupational employment from sampled local government and educational units. Total local government and educational employment was then estimated from the responses of those units sampled.

Sample

The sample was drawn using procedures outlined in the OES Survey Operations Manual. Establishments were divided into different size classes by number of employees. All establishments with more than 250 employees were sampled. Establishments in each smaller size class were sampled in proportion to the employment in the size class; however, no establishment with fewer than four employees was sampled. Employment in these establishments was accounted for in the next larger size class. Each unit that was sampled was assigned a weight according to the ratio of units sampled in that size class. For esample, when all units in a size class were sampled, the weight was one. When the units were sampled at a ratio of one out of four, the sampled unit was given a weight of four. The weighted establishment then represented itself and three other establishments.

Collection

Data collection began in October, 1978 and ended in October, 1980. Two follow-up mailings, personal visits, or telephone calls were made to those establishments whose response was vital for statistical purposes, to those who had difficulty completing the questionnaire, or to those where clarification of the response was necessary.

Estimates

Data from the questionnaires were keypunched and loaded onto tape. The tape was processed using the OES Batch Systems Programs to sort and screen the data. The estimating programs sorted the data into size-class cells. The weighted employment of each occupation in each cell was then estimated individually and summed across all cells in order to produce the final occupational employment estimate for each industry.

Error

Two types of errors, sampling and non-sampling, can affect the results of a survey. Sampling error is the difference between the estimates developed from data collected from a sample and the data collected from the universe from which the sample was drawn. Sampling error is measurable and is expressed as relative error. The relative error shown in this publication is such that the chances are two out of three that the results of comparable universal data collection would not differ by more than the percentage shown. Non-sampling error can arise from faulty questionnaire design, inability to collect necessary data, inaccuracy of data collected, and ineffective processing techniques. Non-sampling error cannot be measured.

Publication

After the data file had been processed through the OES estimates programs, a computer printout was received which contained the estimated employment for each occupation, the relative error of the occupational estimate, the percent distribution of the occupational employment, the number of employees reported in each occupation, and the number of establishments which reported each occupation.

Industries were surveyed at the 3-digit SIC level; however, published data are at the 2-digit level of detail.

Occupational data were not published for industries when the industry employment was less than 1,000. The estimated employment for occupations was rounded to the nearest ten. The estimated employment was put in a residual category when the estimated employment for an occupation was less than 15 or less than 0.05 percent of the total group employment, when the relative error was more than 35 percent, or when an occupation was not reported by at least four establishments. Although they are not published here, the suppressed industry and occupation data will be included in the industry/occupation matrix.

Relative error is not applicable (N.A.) for residual categories, occupational group totals, and total employment because it is not additive. The percent distribution was computed on the unrounded employment estimates; therefore, some occupations with the same published estimated employment may not have the same percent distribution.

Six major occupational groups are listed for each industry. When there was no reported employment in an occupational group, the estimated employment is listed as zero. When the estimated employment for the occupational group was less than 15, the figure was not published; however, the existence of some employment in the group is indicated by a dash (--).

NOTE: Occasionally the sum of occupations will not equal the Total Employment or the occupational category because of rounding.

SELECTED LIST OF RELEVANT PUBLICATIONS

The following is a partial list of publications that may be helpful to manpower planners. The publications are available from the Employment Security Commission of North Carolina, Labor Market Information (LMI) Division. A complete list of LMI publications may be found in its Catalog of Publications and Releases.

1. Results of OES surveys of Occupational Employment for industries in
   - A. Trade
   - B. Manufacturing and Hospitals
   - C. Government and Education
   - D. Nonmanufacturing

2. North Carolina Labor Force Estimates by County, Area, and State. A report in which monthly and annual average employment by major industry divisions, and unemployment, are shown for the State, each county, and each multi-county labor area for the preceding calendar year.

3. Preliminary Civilian Labor Force Estimates. A monthly report showing preliminary labor force, total employment, total unemployment, and unemployment rates for the State and for each of the 100 counties.

4. Active Job Applicants Registered for Work with Employment Security Commission Offices, by applicant's county of residence. A special report prepared upon request depicting the number of actively registered job applicants available for work within a commuting radius of any designated town or industrial site in the State. The report includes a map of the area, total population of the area, and the number of high school graduates entering the labor force.

5. Area Labor Market Newsletters. A monthly or bimonthly report for selected labor areas of the State which includes a narrative analysis and supporting statistical data on employment and unemployment trends in the area.

6. Registered Applicants and Job Openings. A quarterly summary report of job applicants and job openings for selected occupations statewide. The report shows the number of applicants registered to date during the fiscal year with a listing of the number of men and women actively registered at the close of each month. Also, it shows nonfarm job openings received and filled during fiscal year and number unfilled for 30 days or more.

7. North Carolina and Labor Market Area Annual Planning Reports. An annual report which contains detailed labor market data including a definition of the area; economic development and area outlook; population and labor force characteristics and trends; employment developments and outlook by industry and occupation; recent trends in unemployment; estimates of need for manpower services; characteristics of the economically disadvantaged and nondisadvantaged; and barriers to employment of the economically disadvantaged. Also contained in the report are supportive statistical charts, tables, and maps.

8. Employment Projections to 1985 for
   - A. North Carolina

B. Seven Standard Metropolitan Statistical Areas (SMSA)
C. Eighteen Planning Regions

Reports contain projections of future occupational employment needs to the year 1985 for the State, the SMSA's and regions. Reports include a narrative analysis and supportive statistical data in tables and charts.

9. State Labor Summary. A monthly report which provides an overview of statewide labor market conditions. Includes narrative analysis and supporting statistical data on current employment and unemployment trends; labor supply and demand relationships; employment and training program activities; hours worked and wages paid are included in the report.

10. 1981 Wage Rates in Selected Occupations. An annual report giving a statewide breakdown of wage rates by occupation and by industry. Also included are breakdowns by occupation for the eighteen planning regions. Rates are for selected typical production and non-production workers in manufacturing industries.

The following is an additional list of publications available through the U.S. Government Printing Office.

1. Standard Industrial Classification Manual, 1972. A classification of establishments by type of industrial activity which is used to facilitate the collection, tabulation, presentation, and analysis of data; and to promote uniformity and comparability in the presentation of statistical data collected by various agencies of the United States government, State agencies, trade associations, and private research organizations.

2. Dictionary of Occupational Titles, Fourth Edition, 1977. This U.S. Department of Labor, Employment and Training Administration publication contains the country's most comprehensive job descriptions and related information on the 20,000 occupations identified in the United States. Known as the "DOT", the volume groups jobs in a classification structure based on interrelationships of tasks and job requirements.

3. Guide for Occupational Exploration. This U.S. Department of Labor, Employment and Training Administration publication groups the thousands of occupations in the world of work by interests and by ability and traits required for successful performance. Descriptive information is provided for each work group to assist the individual in reviewing, understanding, and evaluating his or her own interests and potentials and relating them to pertinent fields of work.

4. Occupational Outlook Handbook, U.S. Department of Labor. A description of more than 850 occupations that include jobs about which young people are most interested in learning, occupations requiring long periods of education or training, and a number of small but growing fields of employment. Each description contains a section on the nature of the work; industrial and/or geographic places of employment; training, other qualifications, and advancement; and prospective job opportunities on a National level.

DISTRIBUTION OF OCCUPATIONAL GROUPS IN GOVERNMENT EMPLOYMENT

Since the specific functions and services provided by Federal, State, and local governments differ from each other, the occupations required to perform the various functions also differ. The distribution of the occupational groups in government employment is presented in the following table.

DISTRIBUTION OF FEDERAL, STATE, AND LOCAL GOVERNMENT EMPLOYMENT BY OCCUPATIONAL GROUP NORTH CAROLINA, 1975

Occupational Group	Federal Government		State Government		Local Government	
	Employment	Percent Distribution	Employment	Percent Distribution	Employment	Percent Distribution
Total, All Occupations	41,990	100.0	39,700	100.0	67,110	100.0
Managers and Officers	3,670	8.7	2,770	6.9	6,020	9.0
Professional and Technical Workers	9,760	23.2	12,710	32.0	9,370	14.0
Service Workers	2,890	6.9	6,630	16.7	19,910	29.7
Maintenance and Production Workers	7,450	17.8	9,370	23.6	18,190	27.4
Clerical Workers	18,020	43.0	8,220	20.7	13,640	20.3
Sales Workers	200	0.5	-	-	-	-

Federal government employment is concentrated in the clerical occupations. A large portion of this clerical employment is in the postal services occupations of mail·carrier and service clerk. State government employment is more evenly distributed over the occupational groups; the group of professional and technical occupations has the largest employment. Local government employment is concentrated in maintenance and production workers and in service workers. The largest maintenance and production occupation is refuse collector. A large portion of the rest of the maintenance and production employment is distributed over specific maintenance and repair occupations. Local government service employment is concentrated in protective service occupations in police and fire departments. As could be expected, very little government employment is found in sales occupations.

Three tables, which will be presented later in the report, list the ten or more occupations with the highest employment in Federal, State, and local governments. In these tables it is again evident that there is very little over-lap in the specific occupations required to implement the particular functions of the three levels of government. Other than the clerical occupations of general office clerk, typist, and secretary, only the service occupation of police patrol officer is found on more than one list.

FEDERAL GOVERNMENT EMPLOYMENT

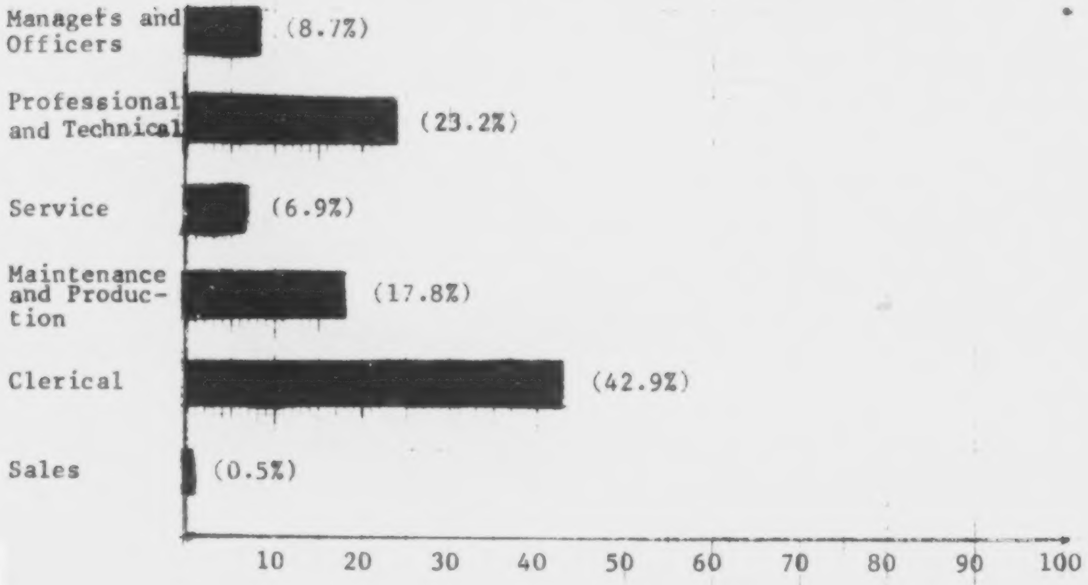
This major group includes full-time temporary, full-time permanent, part-time temporary, and part-time permanent employees on the Federal payroll as of October, 1980. Excluded are the White House staff, the Central Intelligence Agency, the National Security Agency, and the Federal Reserve. The General Accounting Office, the Government Printing Office, and the U. S. Tax Court are the only data included for the Legislative Branch, and the Administrative Office of the U. S. Courts is all that is included for the Judicial Branch.

The following table lists the ten specific occupations in this group in which the most workers were employed in October, 1980. The occupations accounted for 42.4 percent of the total employment.

Occupation	Industry Employment	Percent Distribution
Postal Mail Carriers	8,287	19.7
Postal Service Clerks	1,903	4.5
General Office Clerks	1,488	3.5
Typists	1,212	2.9
Nurse Aides and/or Orderlies	904	2.2
Professional Nurses	869	2.1
Aircraft Mechanics	866	2.1
Biological Science Technicians	783	1.9
Secretaries	746	1.8
Postmasters and/or Mail Superintendents	733	1.7

The graph below illustrates employment by major occupational category.

Percent Distribution of Federal Government Employment by Major Occupational Category in North Carolina, October, 1980



FEDERAL GOVERNMENT EMPLOYMENT
OCTOBER, 1980

Occupation	1980 Employment
Total Employment	41,990
Managers and Officers	3,669
Public Administration Inspectors, Except Construction	666
Construction Inspectors	102
Postmaster and/or Mail Superintendents	733
All Other Managers	2,168
Professional Occupations	6,531
Engineers	553
Aeronautical Engineers	39
Agricultural Engineers	5
Chemical Engineers	48
Civil Engineers	285
Electrical and Electronic Engineers	50
Industrial Engineers	17
Mechanical Engineers	33
Metallurgists and Metallurgical Engineers	2
Safety Engineers	3
Nuclear Engineers	4
All Other Engineers	67
Financial Analysts	4
Mathematicians	12
Statisticians	68
All Other Mathematical Scientists	9
Chemists	241
Geologists and Geophysicists	42
Meteorologists	103
Oceanographers	5
Physicists	21
All Other Physical Scientists	97
Agricultural Scientists	56
Biological Scientists	360
Forester and Conservation Scientists	208
Economists	34
Psychologists	59
Socialogists	1
Urban and Regional Planners	5
All Other Social Scientists	64
Systems Analysts	221
Teachers and/or Instructors, Nonvocational Education	578
Photographers	35
Purchasing Agents and/or Buyers	231
Accountants and Auditors	191
Landscape Architects	20
Architects	8
Caseworkers	71
Clergy	29
Commercial Artists	31
Dentists	30
Dietitians and/or Nutritionists	24
Writers and/or Editors	30
Law Clerks	65

FEDERAL GOVERNMENT EMPLOYMENT

(Continued)

Occupation	1980 Employment
Lawyers	93
Librarians, Professional	30
Curators, Museum	7
Professional Nurses	869
Occupational Therapists	11
Optometrists	1
Paralegal Personnel	9
Personnel and Labor Relations Specialists	222
Pharmacists	55
Physical Therapists	12
Physicians and/or Surgeons	435
Podiatrists	1
Public-Relations Practitioners	30
Veterinarians	56
Judges	26
Tax Examiners, Collectors and/or Revenue Agents	443
All Other Therapists	4
Appraisers, Real Estate	24
Group Recreation Workers	14
Manual-Arts, Music, and/or Recreational Therapists	20
Speech Pathologists and/or Audiologists	17
Corrective Therapists	14
All Other Professional Workers	632
Technician Operations	3,224
Computer Programmers	73
Drafters	20
Electrical and Electronic Technicians	356
Surveyors	48
Broadcast Technicians	42
All Other Engineering Technicians	285
Physical Science Technicians	241
Biological Science Technicians	783
Air Traffic Controllers	397
Dental Assistants	114
Mathematical Technicians	6
Physician's Assistants	45
Airplane Pilots	29
Radio Operators	1
Technical Assistants, Library	41
Pharmacy Helpers	41
Medical-Record Librarians	45
Dental Hygienists	16
Medical Laboratory Technologists	188
Prosthetists-Orthotists	1
Electrocardiograph Technicians	59
Radiologic Technicians and/or Nuclear Medical Technicians	82
All Other Medical & Dental Technicians	58
All Other Technicians	253

FEDERAL GOVERNMENT EMPLOYMENT

(Continued)

Occupation	1980 Employment
Service Workers	2,890
Supervisors	4
Window Washers	1
All Other Janitors, Porters, and Cleaners	511
Guards and Doorkeepers	56
Bakers, Bread and/or Pastry	1
Butchers and/or Meat Cutters	79
Cooks, Institution or Cafeteria	108
All Other Food Service Workers	363
Barbers	7
Cosmetologists and/or Hairstylists	1
Housekeepers	12
Nurse Aides and/or Orderlies	904
Recreation Facility Attendants	3
Forest Conservation Workers	41
Fish and Game Wardens	4
Crossing or Bridge Tenders	28
Guides, Sightseeing or Establishment	1
Social Service Aides	52
Occupational Therapy Assistants	22
Police and Detective Supervisors	51
Detectives, Police	232
Corrective Officers and/or Jailers	89
U. S. Marshalls	40
Fire Fighters	271
Other Service Workers	9
Maintenance and Production Workers	7,454
Supervisors	45
Mechanics and Repairers	2,390
Aircraft Mechanics	866
Automotive Mechanics	250
Body Repairers, Automotive	24
Electric-Tool Repairers	16
Electromedical Equipment Repairers	3
Gasoline-Engine or Mower Repairs	1
Gunsmiths	13
Engineering-Equipment Mechanics	145
Laundry-Machine Mechanics	3
Locksmiths	13
Maintenance Mechanics	439
Office Machine Servicers and/or Cash Register Servicers	10
Refrigeration Mechanics and/or Air Conditioning Mechanics	112
Car Repairers, Railroad	3
Electronic Mechanics	388
Gas and Electric Appliance Repairers	1
Other Mechanics and Repairers	103
Developers and/or Projection Printers	1
Negative Cutters and/or Spotters	1
Markers, Classifiers, Wet Wash Assemblers, Detachers	82
Washers, Machine and/or Starcher	31
Laundry Pressers, Machine	24

FEDERAL GOVERNMENT EMPLOYMENT

(Continued)

Occupation	1980 Employment
Truck Drivers	319
Asbestos and Insulation Workers	7
Boilermakers	1
Cabinetmakers	10
Cable Splicers	65
Carpenters	211
Cement Masons	2
Conductors, Train	7
Crane, Derrick, and Hoist Operators	22
Craters	31
Dredge Operators	4
Electricians	350
Exterminators	30
Glaziers	6
Heavy Equipment Operators	81
Riggers	1
Industrial Truck Operators	165
Inspectors	51
Installer Repairers and/or Section Maintainers	46
Instrument Repairers	4
Line Installers-Repairers	13
Locomotive Engineers	4
Maintenance Repairers, General Utility	288
Oilers	6
Automotive Painters	1
Maintenance Painters	182
Plasterers	21
Electroplaters	21
Plumbers and/or Pipefitters	192
Production Packagers, Hand or Machine	5
Motion Picture Projectionists	1
Roofers	3
Dental-Laboratory Technicians	16
Sandblasters and/or Shotblasters	16
Sewage-Plant Operators	62
Sewing Machine Operators, Regular Equipment-Garment	15
Sheet Metal Workers	401
Stationary Boiler Firers	185
Stationary Engineers	22
Stone Masons	27
Animal Caretakers	8
Tile Setters	2
Tire Fabricator and/or Repairers	1
Tool and Die Makers	9
Track Layers	1
Water Treatment Plant Operators	55
Welders and/or Flamecutters	51
Offset Lithographic Press Operators, Sheet, Roll or Web Fed	35
Strippers	1
Camera Operators, Printing	9
Service Station Attendants	17
Stock Clerks, Sales Floor	179

FEDERAL GOVERNMENT EMPLOYMENT

(Continued)

Occupation	1980 Employment
Highway-Maintenance Men	4
Furniture Finishers	1
Chemical Operators A	2
Heat Treaters, Annealers, and/or Temperers	2
Machine Tool Operators, Combination	172
Patternmakers, Wood	4
Saw Filers	3
Testers	3
Woodworking-Machine Operators	3
Dip Platers, Non-Electrolytic	3
Upholsterers	11
Power Brakes and/or Bending Machine Ops., Metal	1
Copy Markers	1
Gardeners and Groundskeepers	30
Ordinary Seamen	12
Ship Engineers	8
Other Bindery Workers	7
Extruder Operators, Plastics and Rubber	3
Instrument Makers and/or Assemblers	2
Other Assemblers	1
Model and/or Mold Makers	2
Other Skilled Craft and Kindred Workers	14
Other Operatives and Semiskilled Workers	314
Other Laborers and Unskilled Workers	1,015
Clerical Workers	18,020
Clerical Supervisors	27
Computer Operators	110
Keypunch Operators	147
Tabulating-Machine Operators	8
Calculating Machine Operators	1
Stenographers	333
Accounting Clerks	412
Bookkeepers, Hand	65
Cashiers	42
Claim Adjusters	77
Claims Clerks	302
Correspondence Clerks	4
General Office Clerks	1,488
Mail Clerks	197
Payroll and/or Timekeeping Clerks	136
Personnel Clerks	278
Procurement Clerks	62
Real Estate Clerks	38
Receptionists	9
Secretaries	746
Statistical Clerks	110
Switchboard Operators	106
Messengers	6
Travel Clerks	26
Typists	1,212
Postal Service Clerks	1,903

FEDERAL GOVERNMENT EMPLOYMENT

(Continued)

Occupation	1980 Employment
Other Office Clerical Workers	936
Production Clerks and/or Coordinators	195
Shipping Packers	23
Shipping and/or Receiving Clerks	75
Stock Clerks, Stockroom, Warehouse or Storage Yard	45
Dispatchers, Vehicle, Service or Work	9
Postal Mail Carriers	8,287
Other Plant Clerical Workers	605
Sales Workers	202
Sales Clerks	202

STATE GOVERNMENT EMPLOYMENT

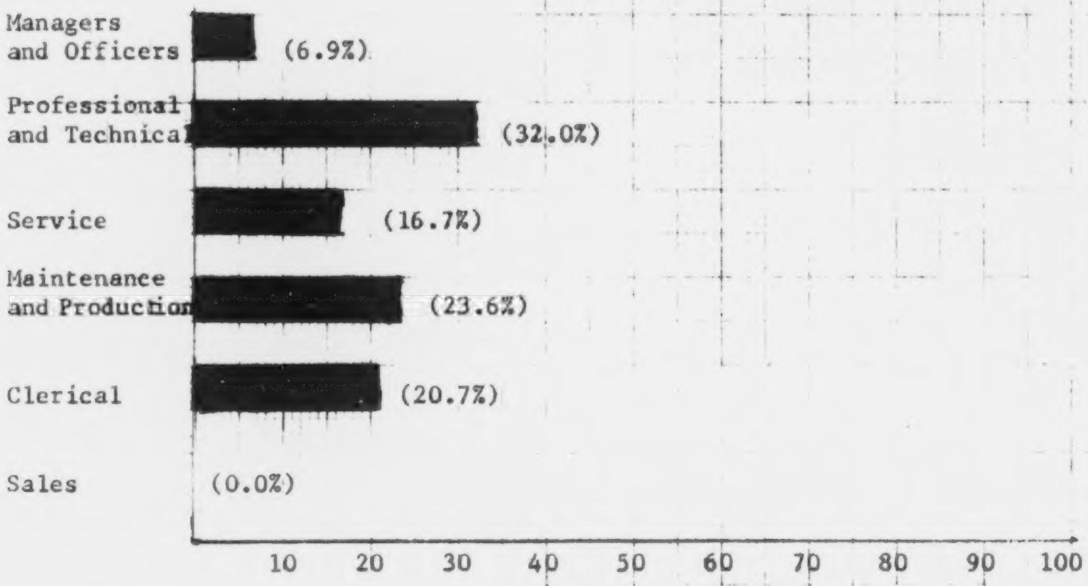
This major group includes full-time temporary, full-time permanent, part-time temporary, and part-time permanent employees on the State payroll as of May, 1979. Excluded are persons serving without compensation and persons on leave without pay. In addition, persons employed in educational services and state-operated hospitals are excluded.

The following table lists the eleven specific occupations in this group in which the most workers were employed in May, 1979. The occupations accounted for 37.9 percent of the total employment.

Occupation	Industry Employment	Percent Distribution
Machinists	2,780	7.0
Correction Officers and/or Jailers	2,680	6.7
Typists	1,710	4.3
Secretaries	1,320	3.3
Stenographers	1,220	3.1
Police Patrol Officers	1,080	2.7
Maintenance Mechanics	1,010	2.5
File Clerks	990	2.5
Accountants and Auditors	780	2.0
Caseworkers	740	1.9
Supervisors, Police and Detectives	740	1.9

The graph below illustrates employment by major occupational category.

Percent Distribution of State Government Employment by Major Occupational Category in North Carolina, May, 1979



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NORTH CAROLINA
State Government
Occupational Employment
May, 1979

Occupation	Employment	Percent Distribution
Total Employment	39,700	100.0
Officers and Managers	2,770	6.9
Chief Executives, General Administrators, & Legislators	210	0.5
Construction Inspectors	40	0.1
Public Administration Inspectors	400	1.0
Other Managers	2,120	5.3
Professional and Technical Workers	12,710	32.0
Engineers	1,020	2.6
Civil Engineers	730	1.8
Electrical and Electronic Engineers	50	0.1
Safety Engineers	30	0.1
Other Engineers	210	0.5
Agricultural Scientists	20	0.1
Foresters and Conservation Scientists	150	0.4
Biological Scientists	150	0.4
Chemists	160	0.4
Geologists and Geophysicists	30	0.1
Sociologists	30	0.1
Economists	210	0.5
Psychologists	70	0.2
Judges	220	0.6
Magistrates	120	0.3
Lawyers	450	1.1
Law Clerks	400	1.0
Paralegal Personnel	270	0.7
Caseworkers	740	1.9
Group Recreation Workers	20	0.1
Physicians and/or Surgeons	50	0.1
Veterinarians	40	0.1
Nurses, Professional	90	0.2
Dietitians and/or Nutritionists	50	0.1
Occupational Therapists	20	0.1
Physical Therapists	20	0.1
Speech Pathologists and/or Audiologists	20	0.1
Accountants and Auditors	780	2.0
Budget Analysts	30	0.1
Tax Collectors, Examiners, and/or Revenue Agents	160	0.4
Librarians, Professional	40	0.1
Personnel and Labor Specialists	350	0.9
Employment Interviewers	660	1.7
Vocational and Educational Counselors	620	1.6
Purchasing Agents and/or Buyers	60	0.2
Public Relations Practitioners	90	0.2
Photographers	20	0.1
Commercial Artists	20	0.1
Systems Analysts	150	0.4
Urban and Regional Planners	180	0.5

Occupation	Employment	Percent Distribution
Architects	20	0.1
Landscape Architects	20	0.1
Library Technical Assistants	20	0.1
Computer Programmers	140	0.4
Drafters	40	0.1
Licensed Practical Nurses	30	0.1
Electrical and Electronic Technicians	30	0.1
Medical and Dental Technicians and Technologists	230	0.6
Traffic Technicians	40	0.1
Science Technicians	200	0.5
Other Physical Scientists	30	0.1
Other Social Scientists	80	0.2
Other Professional Workers	2,260	5.7
Other Engineering Technicians	1,070	2.7
Other Technicians	990	2.5
Service Workers	6,630	16.7
Supervisors, Service	380	1.0
Supervisors, Police and Detectives	740	1.9
Janitors, Porters, and Cleaners	150	0.4
Detectives, Police	150	0.4
Police Patrol Officers	1,080	2.7
Correction Officers and/or Jailers	2,680	6.7
Bailiffs	180	0.5
Forest Conservation Workers	210	0.5
Fish and Game Wardens	90	0.2
Recreation Facility Attendants	50	0.1
Child-Care Workers	200	0.5
Social Service Aides	140	0.4
Nurse Aides and/or Orderlies	120	0.3
Gardeners and Groundskeepers	250	0.6
Guards and Doorkeepers	70	0.2
Cooks, Institution	40	0.1
Other Food Service Workers	20	0.1
Other Service Workers	80	0.2
Maintenance and Production Workers	9,370	23.6
Supervisors	580	1.5
Mechanics and Repairers	1,650	4.2
Diesel Mechanics	60	0.2
Maintenance Mechanics	1,010	2.5
Other Mechanics and Repairers	580	1.5
Carpenters	50	0.1
Electricians	30	0.1
Machinists	2,780	7.0
Maintenance Painters	20	0.1
Welders and/or Flamecutters	20	0.1
Trades Helpers	20	0.1
Truck Drivers	650	1.6
Highway-Maintenance Workers	90	0.2
Stationary Engineers	30	0.1
Other Skilled Workers	170	0.4
Other Semiskilled Workers	920	2.3
Other Unskilled Workers	2,360	5.9

Occupation	Employment	Percent Distribution
Clerical Workers	8,220	20.7
Supervisors	290	0.7
Court Clerks	170	0.4
Survey Workers	30	0.1
Library Assistants	30	0.1
License Clerks	240	0.6
Mail Clerks	50	0.1
Cashiers	30	0.1
Receptionists	50	0.1
Secretaries	1,320	3.3
Stenographers	1,220	3.1
Typists	1,710	4.3
File Clerks	990	2.5
Payroll and/or Timekeeping Clerks	40	0.1
Personnel Clerks	90	0.2
Bookkeepers, Hand	160	0.4
Accounting Clerks	430	1.1
Statistical Clerks	140	0.4
Bookkeeping and/or Billing Machine Operators	30	0.1
Computer Operators	60	0.2
Keypunch Operators	280	0.7
Calculating Machine Operators	80	0.2
General Office Clerks	50	0.1
Stock Clerks, Stockroom	140	0.4
Weighers, Recordkeeping	90	0.2
Other Office Clerical Workers	500	1.3
Sales Workers	-	-

LOCAL GOVERNMENT EMPLOYMENT

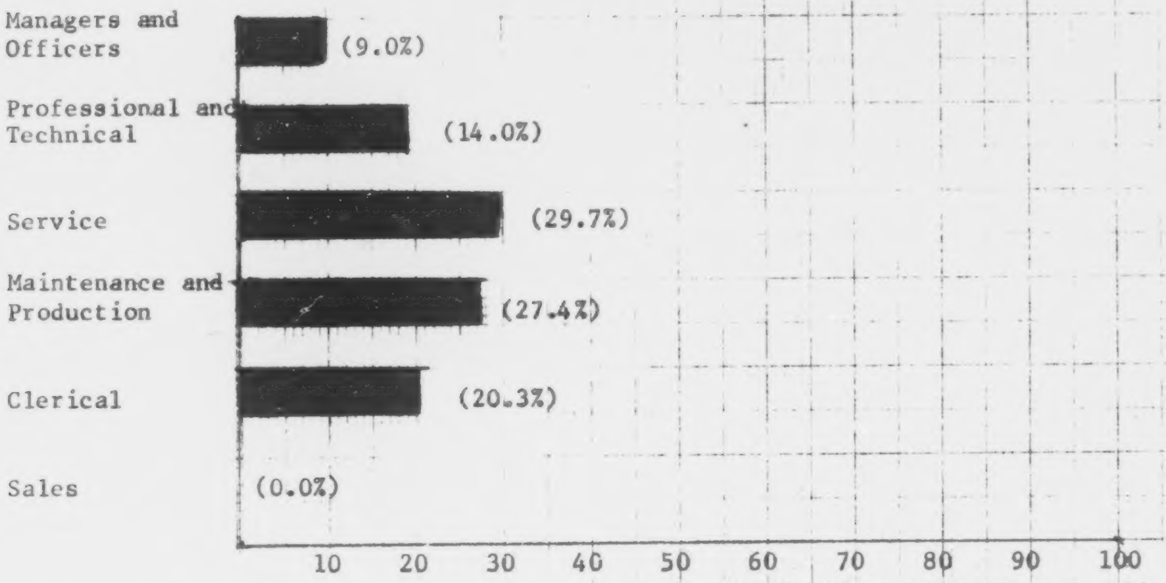
This major group includes full-time temporary, full-time permanent, part-time temporary, and part-time permanent employees on the local government payrolls as of May, 1979. Excluded are persons serving without compensation such as unpaid officials and members of boards and commissions, as well as persons on extended leave without pay. In addition, it excludes all persons employed in educational services and local government-operated hospitals.

The following table lists the eleven specific occupations in this group in which the most workers were employed in May, 1979. The occupations accounted for 41.0 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Police Patrol Officers	4,960	7.4
Fire Fighters	3,460	5.2
Refuse Collectors	2,580	3.8
Social Service Aides	2,300	3.4
Caseworkers	2,280	3.4
Maintenance Repairers, General Utility	2,240	3.3
General Office Clerks	2,240	3.3
Chief Executives, Legislative	2,110	3.1
Typists	2,080	3.1
Eligibility Workers	1,650	2.5
Highway Maintenance Workers	1,650	2.5

The graph below illustrates employment by major occupational category.

Percent Distribution of Local Government Employment by Major Occupational Category in North Carolina, May, 1979



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NORTH CAROLINA
Local Government Occupational Employment
May, 1979

Occupation	Estimated 1/ Employment	Relative 2/ Error %	Percent 1/ Distribution
Total Employment	67,130	N.A.	100.0
Managers and Officers	6,020	N.A.	9.0
Public Administration Inspectors	430	7.3	0.6
Construction Inspectors	650	8.2	1.0
Chief Executives, Legislative	2,110	16.1	3.1
Other Managers	2,830	9.7	4.2
Professional and Technical Workers	9,370	N.A.	14.0
Civil Engineers	440	14.3	0.6
Agricultural Scientists	210	14.6	0.3
Economists	70	16.5	0.1
Psychologists	130	9.9	0.2
Urban and Regional Planners	240	9.3	0.4
Systems Analysts	60	6.3	0.1
Purchasing Agents and/or Buyers	50	13.7	0.1
Accountants and/or Auditors	210	7.8	0.3
Caseworkers	2,280	4.2	3.4
Dietitions and/or Nutritionists	130	12.2	0.2
Lawyers	160	16.3	0.2
Librarians, Professional	230	9.7	0.3
Nurses, Professional	1,080	6.8	1.6
Occupational Therapists	50	20.8	0.1
Personnel and Labor Relations Specialists	100	7.8	0.1
Physical Therapists	30	18.1	0.1
Physicians and/or Surgeons	70	10.0	0.1
Public Relations Practitioners	60	18.8	0.1
Community Organization Workers	270	21.3	0.4
Welfare Investigators	120	24.6	0.2
Tax Examiners, Collection	420	8.5	0.6
Assessors	180	6.7	0.3
Group Recreation Workers	350	6.9	0.5
Computer Programmers	60	7.6	0.1
Drafters	170	6.7	0.2
Science Technicians	130	13.8	0.2
Licensed Practical Nurses	270	12.0	0.4
Physician's Assistants	190	32.8	0.3
Technical Assistants, Library	160	14.0	0.2
Medical and Dental Technicians	240	13.7	0.4
Other Engineers	60	N.A.	0.1
Other Professional Workers	720	N.A.	1.1
Other Technical Workers	430	N.A.	0.6
Service Workers	19,910	N.A.	29.7
Supervisors	140	8.8	0.2
Janitors, Porters, and Cleaners	1,540	6.0	2.3
Guards and Doorkeepers	110	8.4	0.2
Kitchen Helpers	40	24.2	0.1

NORTH CAROLINA
Local Government Occupational Employment
May, 1979

Occupation	Estimated 1/ Employment	Relative 2/ Error %	Percent 1/ Distribution
Cooks, Institution	300	5.0	0.4
Nurse Aides and/or Orderlies	430	20.6	0.7
Recreation Facility Attendants	740	9.1	1.1
School Crossing Guards	540	8.8	0.8
Child-Care Workers	490	10.0	0.7
Social Service Aides	2,300	6.7	3.4
Police Officers	1,610	5.2	2.4
Detectives, Police	320	9.3	0.5
Police Patrol Officers	4,960	3.9	7.4
Parking Enforcement Officers	110	16.9	0.2
Correction Officers and/or Jailers	560	7.1	0.8
Sheriffs	660	12.6	1.0
Bailiffs	90	11.1	0.1
Fire Inspectors	50	8.8	0.1
Fire Fighters	3,460	5.4	5.2
Fire Officers	220	8.1	0.3
Other Food Service Workers	50	9.8	0.1
Other Service Workers	1,190	N.A.	1.8
Maintenance and Production Workers	18,190	N.A.	27.4
Supervisors	840	4.3	1.3
Automotive Mechanics	190	8.4	0.3
Electric-Meter Installers	60	16.7	0.1
Maintenance Mechanics	620	14.4	0.9
Water Meter Installers	50	3.5	0.1
Truck Drivers	1,250	5.7	1.9
Bricklayers	80	5.0	0.1
Bus Drivers	130	15.8	0.2
Carpenters	110	21.4	0.2
Cement Masons	50	15.2	0.1
Electricians	60	19.2	0.1
Heavy Equipment Operators	920	5.2	1.4
Line Installers - Repairers	250	12.3	0.4
Maintenance Repairers, General Utility	2,240	12.5	3.3
Trades Helpers	240	24.2	0.4
Maintenance Painters	90	25.8	0.1
Pipelayers	160	15.2	0.2
Plumbers and/or Pipefitters	50	2.0	0.1
Refuse Collectors	2,580	4.7	3.8
Sewage-Plant Operators	870	8.4	1.3
Street-Light Repairers	40	4.0	0.1
Animal Caretakers	160	5.5	0.2
Water Treatment Plant Operators	860	17.4	1.3
Highway Maintenance Workers	1,650	11.2	2.5
Surveyor Helpers	50	7.2	0.1
Gardeners and Groundskeepers	1,350	11.2	2.0
Bus Drivers, School	110	10.8	0.2
Ambulance Drivers and/or Attendants	480	10.1	0.7

NORTH CAROLINA
Local Government Occupational Employment
May, 1979

Occupation	Estimated 1/ Employment	Relative 2/ Error %	Percent 1/ Distribution
Other Mechanics and Repairers	130	N.A.	0.2
Other Skilled Workers	190	N.A.	0.3
Other Semiskilled Workers	390	N.A.	0.6
Other Laborers	1,940	8.2	2.9
Clerical Workers	13,640	N.A.	20.3
Supervisors	310	10.0	0.5
Bookkeeping/Billing Machine Operators	50	17.9	0.1
Computer Operators	110	8.5	0.2
Keypunch Operators	160	4.2	0.2
Stenographers	150	7.3	0.2
Accounting Clerks	660	4.2	1.0
Bookkeepers, Hand	170	16.2	0.2
Cashiers	150	13.0	0.2
File Clerks	160	12.7	0.2
General Office Clerks	2,240	7.2	3.3
Library Assistants	460	10.4	0.7
Mail Clerks	50	47.2	0.1
Payroll/Timekeeping Clerks	60	14.4	0.1
Personnel Clerks	90	8.4	0.1
Receptionists	250	16.8	0.4
Secretaries	1,530	5.3	2.3
Statistical Clerks	140	17.7	0.2
Switchboard Operators/Receptionists	110	16.0	0.2
Typists	2,080	5.6	3.1
Eligibility Workers	1,650	5.2	2.5
Town Clerks	380	14.2	0.6
Meter Readers, Utility	250	9.4	0.4
Stock Clerks, Stockroom	90	5.4	0.1
Dispatchers, Vehicle, Service, or Work	110	7.5	0.2
Dispatchers, Police	1,240	11.1	1.8
Other Office Machine Operators	90	N.A.	0.1
Other Office Clerical Workers	850	N.A.	1.3
Other Plant Clerical Workers	50	N.A.	0.1
Sales Workers	-	N.A.	-

1/ Detail may not add to totals because of roundings or data not published.

2/ N.A. Not applicable - In the cases where employment from two or more occupations has been summed to residual categories or to occupational groups, relative error is not applicable because it is not additive.

EDUCATIONAL EMPLOYMENT

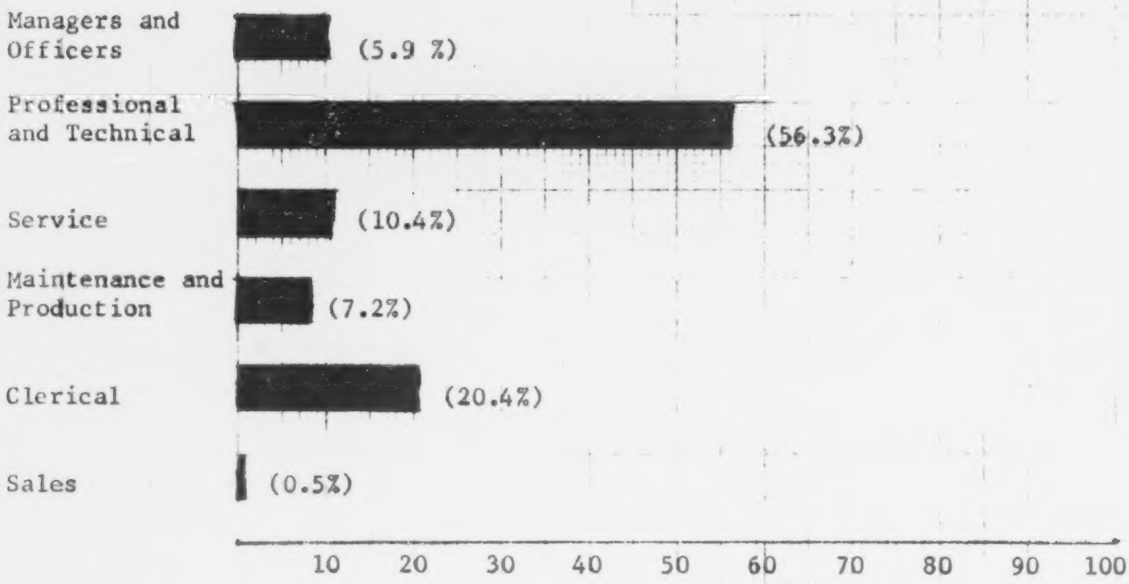
Establishments in this major group are primarily engaged in furnishing formal academic or technical courses, correspondence schools, commercial and trade schools, and libraries. Employment in public elementary and secondary schools is omitted.

The following table lists the ten specific occupations in this group in which the most workers were employed in October, 1978. The occupations accounted for 57.5 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Teachers, Institutional College	3,860	10.5
Secretaries	2,500	6.8
Janitors, Porters, and Cleaners	2,380	6.5
Professors	2,320	6.3
Assistant Professors	2,310	6.3
Associate Professors	2,120	5.8
Teachers, Nonvocational	1,750	4.8
Graduate Assistants	1,460	4.0
Typists	1,410	3.8
Teachers, Elementary or Preschool	1,000	2.7

The following graph illustrates employment by major occupational category.

Percent Distribution of Educational Employment by Major Occupational Category in North Carolina, October, 1978



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NORTH CAROLINA
Occupational Employment In Education
October, 1978

Occupation	Estimated 1/ Employment	Relative 2/ Error %	Percent 1/ Distribution
Total Employment	36,680	N.A.	100.0
Managers and Officers	2,150	N.A.	5.9
Principals	120	9.2	0.3
Assistant Principals	30	8.0	0.0
Other Managers	2,000	N.A.	5.5
Professional and Technical Workers	20,620	N.A.	56.3
Chemists	30	N.A.	0.1
Other Social Scientists	200	N.A.	0.5
Systems Analysts	100	0.0	0.3
Teachers, Secondary Schools	540	6.7	1.5
Teachers, Institutional College	3,860	0.0	10.5
Teachers, Vocational	320	5.8	0.9
Teachers, Nonvocational	1,750	1.6	4.8
Vocational and Educational	270	4.6	0.7
Graduate Assistants	1,460	0.0	4.0
Professors	2,320	0.0	6.3
Associate Professors	2,120	0.0	5.8
Assistant Professors	2,310	0.0	6.3
Lecturers	850	0.0	2.3
Athletic Coaches	180	0.0	0.5
Teachers, Elementary or Preschool	1,000	3.2	2.7
Other Teachers	50	0.0	0.1
Accountants and Auditors	150	0.7	0.4
Librarians, Professional	460	1.0	1.3
Nurses, Professional	140	1.4	0.4
Personnel and Labor Relations Specialists	80	0.0	0.2
Audiovisual Specialists	30	0.0	0.1
Other Professional Workers	1,220	N.A.	3.4
Computer Programmers	220	0.0	0.6
Science Technicians	450	0.0	1.2
Licensed Practical Nurses	40	0.0	0.1
Technical Assistants	210	1.3	0.6
Medical and Dental Technicians	40	0.0	0.1
Other Technicians	220	N.A.	0.6
Service Workers	3,800	N.A.	10.4
Supervisors	210	0.0	0.6
Janitors, Porters, and Cleaners	2,380	0.5	6.5
Guards and Doorkeepers	300	0.3	0.8
Dining Room Attendants	80	0.0	0.2
Kitchen Helpers	340	0.7	0.9
Counter Attendants	140	5.3	0.4
Pantry, Sandwich and/or Coffee Makers	20	0.0	0.1
Cooks, Institution	220	3.9	0.6
Child-Care Workers	40	18.0	0.1
Other Service Workers	70	N.A.	0.2

NORTH CAROLINA
Occupational Employment In Education
October, 1978

Occupation	Estimated 1/ Employment	Relative 2/ Error %	Percent 1/ Distribution
Maintenance and Production Workers	2,640	N.A.	7.2
Supervisors	100	0.0	0.3
Mechanics and Repairers	20	N.A.	0.1
Carpenters	110	0.0	0.3
Electricians	100	0.0	0.3
Maintenance Repairers, General Utilities	540	1.2	1.5
Trades Helpers	100	0.0	0.3
Maintenance Painters	110	0.0	0.3
Press Operators	20	0.0	0.1
Stationary Boiler Firers	90	0.0	0.2
Gardeners and Groundskeepers	340	0.4	0.9
Bus Drivers, School	100	7.4	0.3
Other Semi-Skilled Workers	20	N.A.	0.1
Other Laborers	990	N.A.	2.7
Clerical Workers	7,290	N.A.	20.4
Supervisors	200	0.0	0.5
Computer Operators	100	0.0	0.3
Keypunch Operators	150	0.0	0.4
Other Office Machine Operators	20	N.A.	0.1
Stenographers	210	0.0	0.6
Accounting Clerks	470	0.6	1.3
Bookkeepers, Hand	140	3.1	0.4
Cashiers	110	0.0	0.3
File Clerks	120	2.3	0.3
General Clerks, Office	430	1.4	1.2
Library Assistants	440	1.8	1.2
Mail Clerks	90	0.0	0.3
Payroll and Timekeeping Clerks	60	0.0	0.2
Personnel Clerks	40	0.0	0.1
Receptionists	90	1.6	0.2
Secretaries	2,500	0.3	6.8
Statistical Clerks	90	0.0	0.2
Switchboard Operators	80	0.0	0.2
Switchboard Operators/Receptionists	120	0.0	0.3
Typists	1,410	0.2	3.8
Teacher Aides	130	10.7	0.4
Admissions Evaluators	120	0.0	0.3
Stock Clerks, Stockroom	170	0.0	0.5
Sales Workers	180	N.A.	0.5
Sales Representatives	30	33.8	0.1
Sales Clerks	150	0.7	0.4

1/ Detail may not add to totals because of roundings or data not published.

2/ N.A. Not applicable - In the cases where employment from two or more occupations has been summed to residual categories or to occupational groups, relative error is not applicable because it is not additive.

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OCCUPATIONAL EMPLOYMENT

MANUFACTURING

HOSPITALS

1980
NORTH CAROLINA

JOB SERVICE

Labor Market Information

OCCUPATIONAL EMPLOYMENT IN MANUFACTURING AND HOSPITALS

NORTH CAROLINA

1980

EMPLOYMENT SECURITY COMMISSION
OF NORTH CAROLINA

Glenn R. Jernigan, Chairman

This is a cooperative program involving the Employment Security Commission of North Carolina, the Bureau of Labor Statistics, and the Employment and Training Administration of the U.S. Department of Labor.

MARCH, 1982

A Labor Market Information Publication

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INTRODUCTION

The manpower planning process has increased the need for occupational employment information. The Employment and Training Administration and the Bureau of Labor Statistics, both of the U.S. Department of Labor, have developed the Occupational Employment Statistics (OES) Program to help meet these manpower planning needs. The OES Program has three main elements:

1. Periodic surveys of approximately 2,000 occupations by industry
2. The National/State Industry Occupation Employment Matrix
3. State and area manpower projections by industry and occupation

This is the third report in the OES series based on a survey of manufacturing industries. This publication is based on a survey conducted between June, 1980 and February, 1981, and covers manufacturing industries as defined in the 1972 Standard Industrial Classification Manual (SIC). Establishments engaged in the mechanical and chemical transformation of materials into new products and establishments involved in blending materials such as lubricating oils, plastics, or liquors are included in the manufacturing division. Also included are establishments engaged in assembling component parts of manufactured products so long as the new product is not a structure or other fixed improvement.

In 1980, there were 824,200 persons employed in manufacturing establishments in North Carolina. This was 34.5% of the total nonagricultural wage and salary employment in the State. Chart A shows the relationship of manufacturing employment to the other major divisions of nonagricultural wage and salary employment in the State for 1980. Chart B shows the average annual nonagricultural wage and salary employment in North Carolina from 1972 to 1980. Chart C shows the average annual employment for manufacturing from 1972 to 1980.

NOTE: Employment data for Charts A, B, and C are expressed as average annual figures. The information was obtained from the Current Employment Statistics Program of the Employment Security Commission of North Carolina.

Also included in this publication are occupational estimates for hospitals derived from our first survey of hospital employment. Based upon data collected between June, 1980, and February, 1981, the survey includes data on both the public and private sectors.

CHART A: MANUFACTURING EMPLOYMENT AS COMPARED TO TOTAL NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT 1980

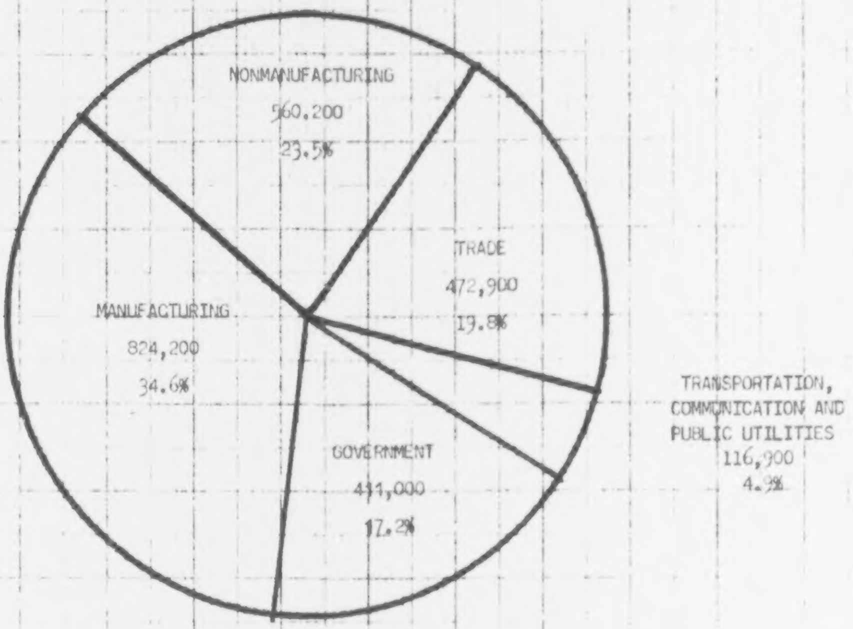

CHART B: NONAGRICULTURAL WAGE AND SALARY EMPLOYMENT

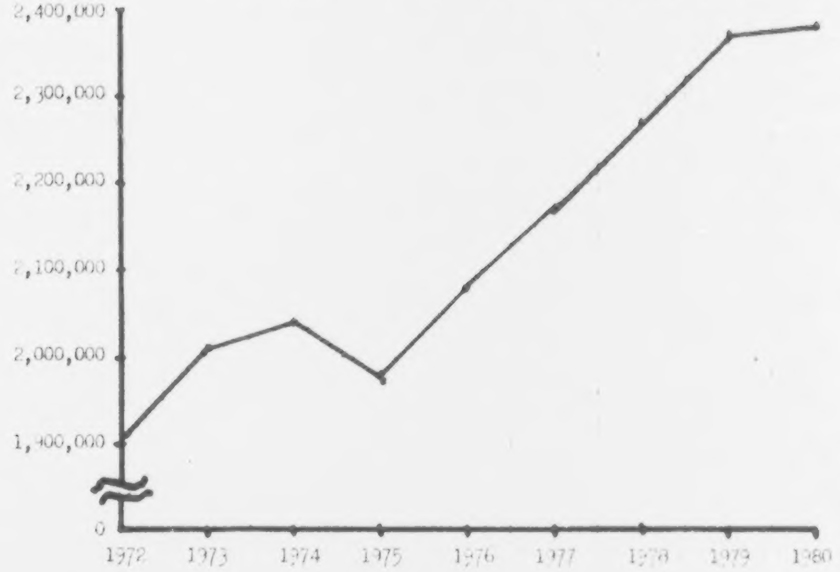

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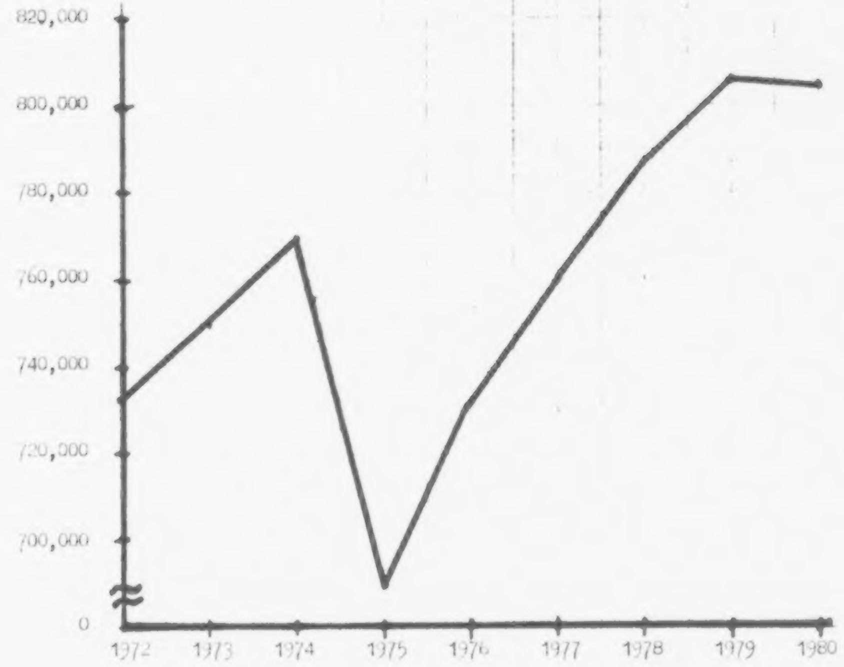
CHART C: MANUFACTURING WAGE AND SALARY EMPLOYMENT



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METHODOLOGY

A questionnaire was mailed to sampled manufacturing establishments in order to obtain occupational data. The total occupational employment for an industry was then estimated from the responding establishments.

Sample

The sample was drawn using procedures outlined in the OES Survey Operations Manual. Establishments were divided into different size classes by number of employees. All establishments with more than 250 employees were sampled. Establishments in each smaller size class were sampled in proportion to the employment in the size class; however, no establishment with fewer than four employees was sampled. Employment in these establishments was accounted for in the next larger size class. Each unit that was sampled was assigned a weight according to the ratio of units sampled in that size class. For example, when all units in a size class were sampled, the weight was one. When the units were sampled at a ratio of one out of four, the sampled unit was given a weight of four. The weighted establishment then represented itself and three other establishments.

Collection

Data collection began in May, 1980 and ended in February, 1981. Two follow-up mailings, personal visits, or telephone calls were made to those establishments whose response was vital for statistical purposes, to those who had difficulty completing the questionnaire, or to those where clarification of the response was necessary.

Estimates

Data from the questionnaires were keypunched and loaded to tape. The tape was processed using the OES Batch Systems Programs to sort and screen the data. The estimating programs sorted the data into size class cells. The weighted employment of each occupation in each cell was then estimated individually and summed across all cells in order to produce the final occupational employment estimate for each industry.

Error

Two types of errors, sampling and non-sampling, can affect the results of a survey. Sampling error is the difference between the estimates developed from data collected from a sample and the data collected from the universe from which the sample was drawn. Sampling error is measurable and is expressed as relative error. The relative error shown in this publication is such that the chances are two out of three that the results of comparable universal data collection would not differ by more than the percentage shown. Non-sampling error can arise from faulty questionnaire design, inability to collect necessary data, inaccuracy of data collected, and ineffective processing techniques. Non-sampling error cannot be measured.

Publication

After the data file had been processed through the OES estimates programs, a computer printout was received which contained the estimated employment for each occupation, the relative error of the occupational estimate, the percent distribution of the occupational employment, the number of employees reported in each occupation, and the number of establishments which reported each occupation.

Industries were surveyed at the 3-digit SIC level; however, published data are at the 2-digit level of detail. The following exceptions were made to this format. Industry codes 259, 329, 333, 341, 361, and 387 were excluded due to inadequate response.

Occupational data were not published for industries when the industry employment was less than 1,000. The estimated employment for occupations was rounded to the nearest ten. The estimated employment was put in a residual category when the estimated employment for an occupation was less than 15 or less than 0.05 percent of the total group employment, when the relative error was more than 35 percent, or when an occupation was not reported by at least four establishments. Although they are not published here, the suppressed industry and occupation data will be included in the industry/occupation matrix.

Relative error is not applicable (N.A.) for residual categories, occupational group totals, and total employment because it is not additive. The percent distribution was computed on the unrounded employment estimates; therefore, some occupations with the same published estimated employment may not have the same percent distribution.

Six major occupational groups are listed for each industry. When there was no reported employment in an occupational group, the estimated employment is listed as zero. When the estimated employment for the occupational group was less than 15, the figure was not published; however, the existence of some employment in the group is indicated by a dash (--).

NOTE: Occasionally the sum of occupations will not equal the Total Employment or the occupational category because of rounding.

SELECTED LIST OF RELEVANT PUBLICATIONS

The following is a partial list of publications that may be helpful to manpower planners. The publications are available from the Employment Security Commission of North Carolina, Labor Market Information (LMI) Division. A complete list of LMI publications may be found in its Catalog of Publications and Releases.

1. Results of OES surveys of Occupational Employment for industries in
   - A. Trade
   - B. Manufacturing and Hospitals
   - C. Government and Education
   - D. Nonmanufacturing

2. North Carolina Labor Force Estimates by County, Area, and State. A report in which monthly and annual average employment by major industry divisions, and unemployment, are shown for the State, each county, and each multi-county labor area for the preceding calendar year.

3. Preliminary Civilian Labor Force Estimates. A monthly report showing preliminary labor force, total employment, total unemployment, and unemployment rates for the State and for each of the 100 counties.

4. Active Job Applicants Registered for Work with Employment Security Commission Offices, by applicant's county of residence. A special report prepared upon request depicting the number of actively registered job applicants available for work within a commuting radius of any designated town or industrial site in the State. The report includes a map of the area, total population of the area, and the number of high school graduates entering the labor force.

5. Area Labor Market Newsletters. A monthly or bimonthly report for selected labor areas of the State which includes a narrative analysis and supporting statistical data on employment and unemployment trends in the area.

6. Registered Applicants and Job Openings. A quarterly summary report of job applicants and job openings for selected occupations statewide. The report shows the number of applicants registered to date during the fiscal year with a listing of the number of men and women actively registered at the close of each month. Also, it shows nonfarm job openings received and filled during fiscal year and number unfilled for 30 days or more.

7. North Carolina and Labor Market Area Annual Planning Reports. An annual report which contains detailed labor market data including a definition of the area; economic development and area outlook; population and labor force characteristics and trends; employment developments and outlook by industry and occupation; recent trends in unemployment; estimates of need for manpower services; characteristics of the economically disadvantaged and nondisadvantaged; and barriers to employment of the economically disadvantaged. Also contained in the report are supportive statistical charts, tables, and maps.

8. Employment Projections to 1985 for
   - A. North Carolina

B. Seven Standard Metropolitan Statistical Areas (SMSA)
C. Eighteen Planning Regions

Reports contain projections of future occupational employment needs to the year 1985 for the State, the SMSA's and regions. Reports include a narrative analysis and supportive statistical data in tables and charts.

9. State Labor Summary. A monthly report which provides an overview of statewide labor market conditions. Includes narrative analysis and supporting statistical data on current employment and unemployment trends; labor supply and demand relationships; employment and training program activities; hours worked and wages paid are included in the report.

10. 1981 Wage Rates in Selected Occupations. An annual report giving a statewide breakdown of wage rates by occupation and by industry. Also included are breakdowns by occupation for the eighteen planning regions. Rates are for selected typical production and non-production workers in manufacturing industries.

The following is an additional list of publications available through the U.S. Government Printing Office.

1. Standard Industrial Classification Manual, 1972. A classification of establishments by type of industrial activity which is used to facilitate the collection, tabulation, presentation, and analysis of data; and to promote uniformity and comparability in the presentation of statistical data collected by various agencies of the United States government, State agencies, trade associations, and private research organizations.

2. Dictionary of Occupational Titles, Fourth Edition, 1977. This U.S. Department of Labor, Employment and Training Administration publication contains the country's most comprehensive job descriptions and related information on the 20,000 occupations identified in the United States. Known as the "DOT", the volume groups jobs in a classification structure based on interrelationships of tasks and job requirements.

3. Guide for Occupational Exploration. This U.S. Department of Labor, Employment and Training Administration publication groups the thousands of occupations in the world of work by interests and by ability and traits required for successful performance. Descriptive information is provided for each work group to assist the individual in reviewing, understanding, and evaluating his or her own interests and potentials and relating them to pertinent fields of work.

4. Occupational Outlook Handbook, U.S. Department of Labor. A description of more than 850 occupations that include jobs about which young people are most interested in learning, occupations requiring long periods of education or training, and a number of small but growing fields of employment. Each description contains a section on the nature of the work; industrial and/or geographic places of employment; training, other qualifications, and advancement; and prospective job opportunities on a National level.

FOOD AND KINDRED PRODUCTS
(SIC 20)

This major group includes those establishments engaged in the manufacture of food, beverages, and related products for human consumption. Prepared feeds for fowl and animals are included also.

The following table shows the percent distribution of establishments and employment by establishment size. Nearly 75 percent of the total employment in this industry is in the establishments with 100 or more employees.

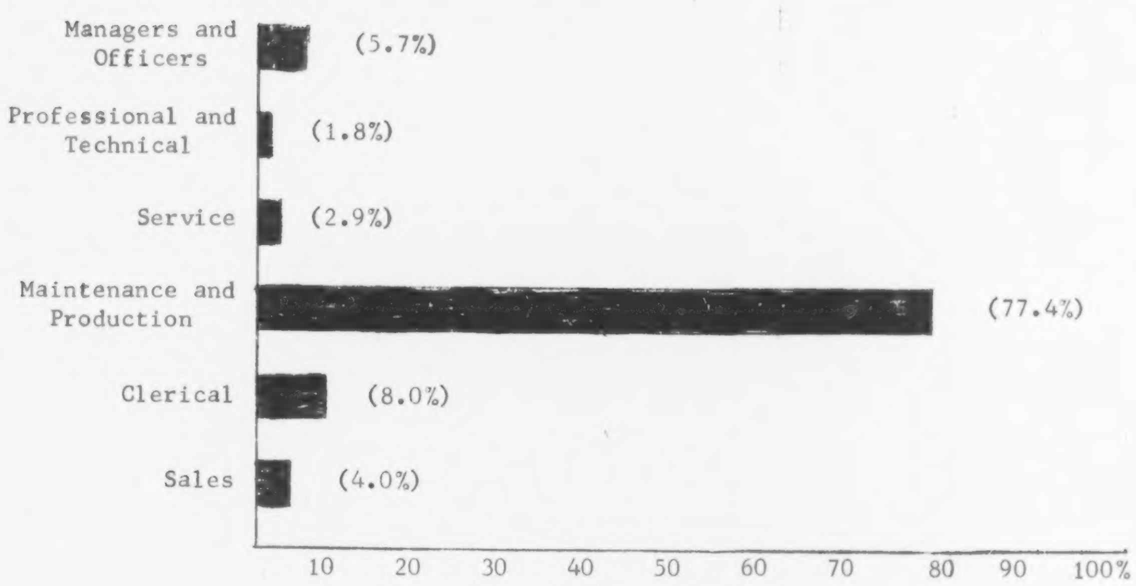
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	52.7	5.5
20 - 49 employees	20.1	9.5
50 - 99 employees	12.0	12.6
100 or more employees	15.2	72.4

The following table lists the ten specific occupations in the food industry in which the most workers were employed in June, 1980. These occupations had 52.7 percent of the group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Poultry Dressers and/or Eviscerators	5,590	12.4
Delivery and/or Route Workers	4,970	11.0
Production Packagers	4,210	9.4
Managers and Officers	2,580	5.7
Truck Drivers	1,280	2.8
Sales Representatives	1,270	2.8
Supervisors	1,170	2.6
Janitors, Porters, and Cleaners	1,070	2.4
Chicken Cutters	800	1.8
Maintenance Mechanics	770	1.7

The graph below illustrates employment by major occupational category.

PERCENT DISTRIBUTION OF FOOD AND KINDRED PRODUCTS EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, JUNE, 1980



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FOOD AND KINDRED PRODUCTS
(SIC 20)
June, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	44,940	N.A.	100.0
Managers and Officers	2,580	4.1	5.7
Professional and Technical Workers	820	N.A.	1.8
Engineers	140	N.A.	0.4
Industrial Engineers	30	14.7	0.1
Mechanical Engineers	70	6.0	0.2
Other Engineers	40	N.A.	0.1
Chemists	50	9.8	0.1
Biological Scientists	20	21.7	0.1
Purchasing Agents and/or Buyers	110	9.9	0.2
Accountants and Auditors	130	6.5	0.3
Professional Nurses	30	3.6	0.1
Personnel and Labor Relations Specialists	90	9.2	0.2
Other Professional Workers	40	N.A.	0.1
Computer Programmers	30	12.8	0.1
Biological Scientist Technicians	60	24.9	0.1
Other Science Technicians	90	N.A.	0.2
Other Technicians	30	N.A.	0.1
Service Workers	1,310	N.A.	2.9
Service Supervisors	40	11.4	0.1
Janitors, Porters, and Cleaners	1,070	6.4	2.4
Guards and Doorkeepers	130	7.9	0.3
Food Service Workers	40	6.8	0.1
Other Service Workers	30	N.A.	0.1
Maintenance and Production Workers	34,810	N.A.	77.4
Supervisors	1,170	4.2	2.6
Mechanics and Repairers	1,690	N.A.	3.7
Automotive Mechanics	470	5.7	1.0
Maintenance Mechanics	770	5.9	1.7
Refrigeration and/or Air Conditioning Mechanics	70	9.7	0.2
Coin and/or Vending Machine Servicers	250	6.3	0.5
Other Mechanics and Repairers	130	N.A.	0.3
Truck Drivers	1,280	6.1	2.9
Carpenters	50	21.8	0.1
Cooks and/or Cookers	200	7.6	0.4
Delivery and Route Workers	4,970	5.4	11.0
Extractors and/or Plant Operators	50	8.8	0.1
Electricians	150	3.9	0.3
Industrial Truck Operators	700	5.4	1.6
Inspectors	170	15.7	0.4
Instrument Repairers	40	15.8	0.1
Machinists	120	17.1	0.3

FOOD AND KINDRED PRODUCTS
(SIC 20)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Maintenance Repairers, General Utility	620	8.7	1.4
Trades Helpers	190	18.0	0.4
Mixers	540	10.4	1.2
Oilers	30	8.6	0.1
Order Fillers	550	13.6	1.2
Oven Operators	190	13.6	0.4
Maintenance Painters	40	19.2	0.1
Production Packagers	4,210	7.7	9.4
Stationary Boiler Firers	40	6.0	0.1
Welders and Flamecutters	30	14.3	0.1
Baker Helpers	450	24.6	1.0
Boners, Meat	150	18.8	0.3
Boners, Poultry	410	23.3	0.9
Butchers, All-Around	230	24.9	0.5
Carbonation Equipment Tenders, Beer	60	3.1	0.1
Casing Finishers	70	26.8	0.2
Cheesemakers	30	0.0	0.1
Cheesemaker Helpers	30	0.0	0.1
Chicken Cutters	800	10.1	1.8
Cooler Room Workers, Meat	60	31.5	0.1
Dairy Processing Equipment Operators	170	8.5	0.4
Dehairing Machine Tenders	40	27.2	0.1
Dividing-Machine Operators and/or Dough-Brake Machine Operators	140	25.2	0.3
Feed Pellet Mill Operators	120	14.3	0.3
Flavor Room Workers	30	3.4	0.1
Grain Receivers	40	31.8	0.1
Ingredient Scalers	60	25.9	0.1
Meat Grinders	60	26.6	0.1
Millers	250	16.2	0.5
Novelty Workers	80	11.2	0.2
Poultry Dressers and/or Eviscerators	5,590	3.9	12.4
Shellfish Shuckers	630	29.5	1.4
Animal Skinners	70	26.0	0.2
Stickers	30	12.8	0.1
Stunners	90	23.9	0.2
Testers	220	8.6	0.5
Conveyor Operators or Tenders	60	20.5	0.1
Cutting Machine Operators, Food	210	17.5	0.5
Fish Cleaners/Butchers	170	33.2	0.4
Cannery Workers	360	8.6	0.8
Production Weighers	140	25.4	0.3
Depositors, Food	30	25.0	0.1
Picklers, Food	70	31.4	0.2
Washers and/or Separators, Food	100	19.9	0.2
Graders, Food and/or Skins	170	8.3	0.4

FOOD AND KINDRED PRODUCTS
(SIC 20)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Equipment Cleaners, Hand	340	12.2	0.8
Filters and/or Filter Press Operators	30	3.8	0.1
Other Skilled Workers	390	N.A.	0.9
Other Semiskilled Workers	1,580	N.A.	3.5
Other Unskilled Workers	4,220	N.A.	9.4
Clerical Workers	3,590	N.A.	8.0
Supervisors	100	19.9	0.2
Office Machine Operators	230	N.A.	0.5
Bookkeeping and/or Billing Machine Operators	60	17.5	0.1
Computer Operators	70	10.0	0.1
Keypunch Operators	80	10.1	0.2
Other Machine Operators	20	N.A.	0.1
Accounting Clerks	350	7.2	0.8
Bookkeepers, Hand	250	8.2	0.6
General Office Clerks	480	7.3	1.1
Order Clerks	100	12.2	0.2
Payroll and/or Timekeeping Clerks	100	5.7	0.2
Personnel Clerks	60	7.2	0.1
Procurement Clerks	20	12.5	0.1
Secretaries	320	7.3	0.7
Statistical Clerks	40	15.2	0.1
Switchboard Operators/Receptionists	80	6.6	0.2
Typists	50	8.0	0.1
Production Clerks and/or Coordinators	70	10.3	0.2
Shipping Packers	480	10.2	1.1
Shipping and Receiving Clerks	510	9.3	1.1
Weighers, Recordkeeping	60	20.6	0.1
Stock Clerks, Stockroom and Warehouse	150	9.8	0.3
Other Clerical Workers	140	N.A.	0.3
Sales Workers	1,830	N.A.	4.0
Sales Representatives	1,270	12.5	2.8
Sales Clerks	560	16.8	1.2

TOBACCO MANUFACTURERS
(SIC 21)

Establishments in this major group are involved in the manufacture of cigarettes, cigars, smoking and chewing tobacco, and snuff. The stemming and redrying of tobacco are included in this category.

The following table shows the percent distribution of establishments and employment by establishment size. The size classes with 99 or fewer employees account for only 2 percent of the employment.

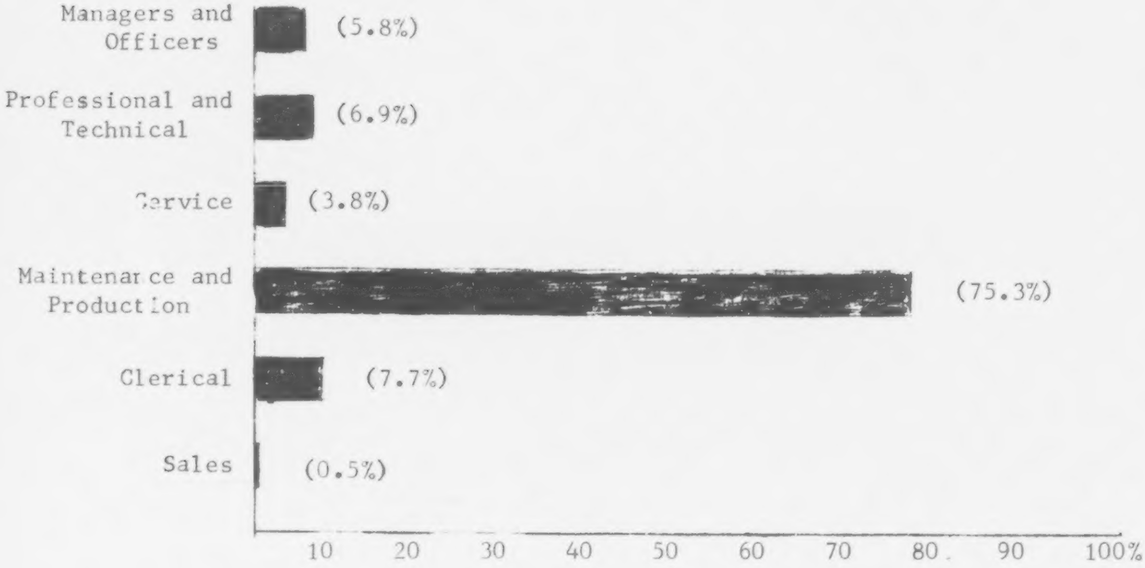
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	21.9	0.2
20 - 49 employees	9.3	0.5
50 - 99 employees	6.3	0.6
100 or more employees	62.5	98.7

The following table lists the ten specific occupations of the tobacco industry in which the most workers were employed in April, 1980. These occupations accounted for nearly 47 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Production Packagers	2,000	8.8
Cigarette Making Machine Operators	1,920	8.4
Managers and Officers	1,320	5.8
Supervisors	1,190	5.2
Machine Adjusters	1,120	4.9
Inspectors	1,070	4.7
Making Machine Catchers	640	2.8
Industrial Truck Operators	600	2.6
Janitors, Porters, and Cleaners	570	2.5
Maintenance Mechanics	440	1.9

Illustrated in the following graph is employment by major occupational group.

PERCENT DISTRIBUTION OF TOBACCO MANUFACTURERS EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, APRIL, 1980



TOBACCO MANUFACTURERS
(SIC 21)
April, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	22,750	N.A.	100.0
Managers and Officers	1,320	3.8	5.8
Professional and Technical Workers	1,590	N.A.	6.9
Engineers	150	N.A.	0.6
Industrial Engineers	30	9.4	0.1
Mechanical Engineers	90	4.3	0.4
Other Engineers	30	N.A.	0.1
Chemists	160	6.5	0.7
Purchasing Agents and/or Buyers	300	17.1	1.3
Accountants and Auditors	110	11.7	0.5
Professional Nurses	20	13.3	0.1
Other Professional Workers	190	N.A.	0.8
Electrical and Electronic Technicians	140	7.7	0.6
Other Technicians	520	N.A.	2.3
Service Workers	880	N.A.	3.8
Janitors, Porters, and Cleaners	570	7.8	2.5
Guards and Doorkeepers	210	7.1	0.9
Other Service Workers	100	N.A.	0.4
Maintenance and Production Workers	17,120	N.A.	75.3
Supervisors	1,190	4.3	5.2
Mechanics and Repairers	1,800	N.A.	7.9
Automotive Mechanics	20	12.2	0.1
Maintenance Mechanics	440	3.6	1.9
Machine Adjusters	1,120	3.1	4.9
Hogshead Coopers	120	9.3	0.5
Other Mechanics and Repairers	100	N.A.	0.4
Truck Drivers	260	7.0	1.2
Carpenters	50	3.5	0.2
Cooks and/or Cookers	20	13.9	0.1
Electricians	180	2.0	0.8
Industrial Truck Operators	600	3.0	2.6
Inspectors	1,070	2.2	4.7
Leaf Conditioners and/or Casers	20	10.2	0.1
Machinists	260	2.2	1.1
Maintenance Repairers, General Utility	70	18.7	0.3
Mixers	40	3.4	0.2
Oilers	60	12.1	0.3
Maintenance Painters	20	0.0	0.1
Plumbers and/or Pipefitters	120	1.7	0.5
Production Packagers	2,000	1.5	8.8
Sheet Metal Workers	60	2.2	0.3
Stationary Boiler Firers	60	5.1	0.3
Stationary Engineers	40	3.9	0.2

TOBACCO MANUFACTURERS
(SIC 21)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Welders and Flamecutters	30	0.0	0.1
Drier Operators	110	7.5	0.5
Casing Machine Operators	40	7.6	0.2
Cigarette Filter Making Machine Operators	320	4.0	1.4
Cigarette Making Machine Operators	1,920	1.5	8.4
Making Machine Catchers	640	6.3	2.8
Ordering Machine Operators	20	9.6	0.1
Pickers	160	5.1	0.7
Testers	330	4.9	1.5
Cutters and/or Grinder Operators	70	10.0	0.3
Feeders-Catchers, Tobacco	40	15.4	0.2
Other Skilled Workers	430	N.A.	1.9
Other Semiskilled Workers	1,010	N.A.	4.4
Other Unskilled Workers	4,080	N.A.	17.9
Clerical Workers	1,720	N.A.	7.7
Supervisors	80	11.7	0.4
Keypunch Operators	20	14.3	0.1
Stenographers	110	6.5	0.5
Accounting Clerks	90	5.3	0.4
Bookkeepers, Hand	30	16.1	0.1
General Office Clerks	370	9.0	1.6
Payroll and/or Timekeeping Clerks	110	2.3	0.5
Personnel Clerks	30	5.4	0.1
Procurement Clerks	40	6.2	0.2
Secretaries	240	5.9	1.1
Typists	70	7.2	0.3
Production Clerks and/or Coordinators	20	13.2	0.1
Shipping Packers	20	23.5	0.1
Shipping and Receiving Clerks	60	29.4	0.3
Weighers, Recordkeeping	20	17.6	0.1
Stock Clerks, Stockroom and Warehouse	50	8.0	0.2
Other Clerical Workers	360	N.A.	1.5
Sales Workers	120	N.A.	0.5
Sales Representatives	120	4.9	0.5

TEXTILE MILL PRODUCTS
(SIC 22 EXCEPT 221)

This major group includes establishments engaged in performing any of the following operations: (1) preparing fiber and manufacturing of yarn, thread, braids, twine, and cordage; (2) manufacturing broad and narrow woven fiber, knit fabric, and carpets and rugs from yarn; (3) dyeing and finishing fiber, yarn, fabric, and knit apparel; (4) coating, waterproofing, or otherwise treating fabric; (5) the integrated manufacture of knit apparel and other finished articles from yarn; and (6) the manufacture of felt and lace goods; nonwoven fabrics and miscellaneous textiles. This classification includes contract mills (processes materials owned by others) and integrated mills (buys raw materials, manufactures, and sells finished textile goods).

The percent distribution of establishments and employment by establishment size are shown in the following table. As may be observed, the largest size class accounts for 89 percent of the employment, although it accounts for only 38 percent of the firms.

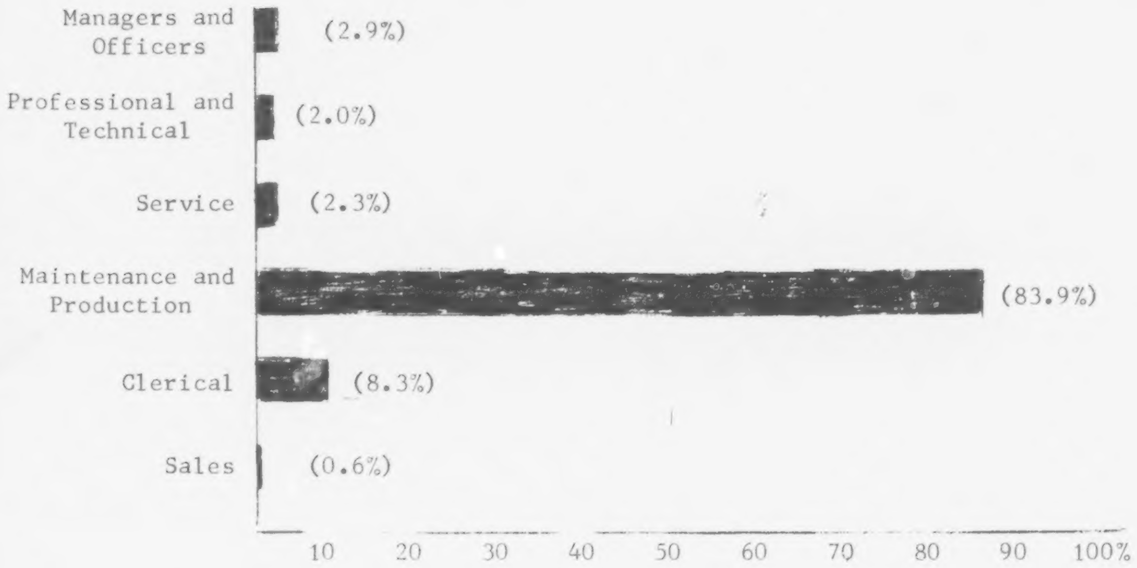
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	30.7	2.0
20 - 49 employees	18.3	3.5
50 - 99 employees	12.4	5.5
100 or more employees	38.6	89.0

The following table lists the ten specific occupations in the textile group in which the most workers were employed in April, 1980. These occupations accounted for 30 percent of the group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Sewing Machine Operators, Regular Equipment-Garment	9,030	4.3
Spinners, Frame	8,170	3.9
Knitting Machine Operators	7,870	3.8
Inspectors	6,840	3.3
Winder Operators, Automatic	6,460	3.1
Yarn Winders	5,840	2.8
Doffers	5,280	2.5
Production Packagers	4,630	2.2
Knitting Machine Fixers	4,620	2.2
Sewing Machine Operators, Regular Equipment-Nongarment	4,490	2.2

The following table illustrates the employment by major occupational group.

PERCENT DISTRIBUTION OF TEXTILE MILL PRODUCTS EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, APRIL, 1980



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TEXTILE MILL PRODUCTS
(SIC 22, EXCEPT 221)
April, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	208,290	N.A.	100.0
Managers and Officers	6,110	4.1	2.9
Professional and Technical Workers	4,260	N.A.	2.0
Engineers	700	N.A.	0.3
Industrial Engineers	470	5.0	0.2
Mechanical Engineers	230	6.7	0.1
Chemists	160	13.9	0.1
Systems Analysts	340	27.4	0.2
Purchasing Agents and/or Buyers	280	6.6	0.1
Accountants and Auditors	730	12.2	0.3
Professional Nurses	140	7.6	0.1
Personnel and Labor Relations Specialists	440	4.4	0.2
Designers	120	10.0	0.1
Other Professional Workers	150	N.A.	0.1
Computer Programmers	200	13.3	0.1
Engineering Technicians	170	8.6	0.1
Colorists	230	11.0	0.1
Other Science Technicians	510	N.A.	0.2
Other Technicians	90	N.A.	0.1
Service Workers	4,570	N.A.	2.3
Supervisors	340	29.0	0.2
Janitors, Porters, and Cleaners	2,480	3.9	1.2
Guards and Doorkeepers	740	8.9	0.4
Other Service Workers	1,010	N.A.	0.5
Maintenance and Production Workers	174,780	N.A.	83.9
Supervisors	7,480	3.3	3.6
Mechanics and Repairers	14,160	N.A.	6.8
Automotive Mechanics	100	23.7	0.1
Maintenance Mechanics	2,400	12.9	1.2
Knitting Machine Fixers	4,620	6.6	2.2
Loom Fixers	2,340	4.9	1.1
Section Repairers and Setters	3,290	7.1	1.6
Sewing Machine Mechanics	370	10.9	0.2
Other Mechanics and Repairers	1,040	N.A.	0.5
Pressers, Hand	150	33.6	0.1
Truck Drivers	880	9.5	0.4
Carpenters	280	8.4	0.1
Drawer-Ins, Hand	260	6.1	0.1
Electricians	890	5.6	0.4
Industrial Truck Operators	1,920	6.1	0.9
Inspectors	6,840	6.2	3.3
Instructors, Apparel and Textile Machines	470	8.4	0.2

TEXTILE MILL PRODUCTS
(SIC 22, EXCEPT 221)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Machinists	690	7.8	0.3
Maintenance Repairers, General Utility	2,460	6.9	1.2
Trades Helpers	1,340	14.6	0.6
Millwrights	280	9.7	0.1
Oilers	670	7.4	0.3
Order Fillers	1,000	11.0	0.5
Maintenance Painters	160	7.7	0.1
Plumbers and/or Pipefitters	120	9.8	0.1
Production Packagers	4,630	13.1	2.2
Sewing Machine Operators, Regular Equipment - Garment	9,030	12.1	4.3
Sewing Machine Operators, Regular Equipment - Nongarment	4,490	15.3	2.2
Sewing Machine Operators, Special Equipment - Nongarment	1,200	28.9	0.6
Spooler Operators, Automatic	1,140	16.3	0.5
Stationary Boiler Firers	110	20.2	0.1
Welders and Flamecutters	120	10.9	0.1
Weavers	4,140	4.8	2.0
Back Tenders, Cloth Printing	110	27.8	0.1
Battery Loaders	410	9.6	0.2
Beam-Dyer Operators	310	14.8	0.1
Beam-Warper Tenders	870	11.7	0.4
Bleach-Range Operators	210	17.2	0.1
Blending-Machine Operators	410	17.5	0.2
Boarding-Machine Operators, Hosiery	3,100	15.7	1.5
Bobbin Sorters	230	8.9	0.1
Bobbin Winders, Machine	880	14.5	0.4
Braiding Machine Operators	450	21.0	0.2
Burlers	800	7.9	0.4
Calendar Operators, Cloth Press	220	22.9	0.1
Calendar-Machine Operators, Knit Goods	310	21.4	0.1
Card Grinders	430	9.1	0.2
Card Tenders	2,310	9.8	1.1
Drawing-Frame Tenders	1,980	7.4	0.9
Cloth Feeders	810	24.2	0.4
Finishing-Range Tenders	410	23.0	0.2
Finishing-Range Operators	590	15.4	0.3
Cloth Printers	110	23.7	0.1
Cloth Trimmers, Machine	220	20.3	0.1
Cloth or Carpet Winders	180	11.9	0.1
Coating Machine Operators	210	18.0	0.1
Creelers, Yarn	3,200	7.3	1.5
Cutters, Portable Machine	250	19.1	0.1
Doffers	5,280	5.4	2.5

TEXTILE MILL PRODUCTS
(SIC 22, EXCEPT 221)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Drawing-In Machine Tenders	280	8.1	0.1
Dye-Range Operators	920	16.2	0.4
Dye-Reel Operators	870	19.6	0.4
Dye-Tub Operators	1,130	14.3	0.5
Harness Builders, Loom	400	6.1	0.2
Harness Placers	610	9.4	0.3
Knitters, Full Fashioned	320	26.6	0.2
Knitting Machine Operators	7,870	11.0	3.8
Loom-Winder Tenders	380	16.2	0.2
Cloth Menders	400	16.8	0.2
Mercerizer Operators	130	28.9	0.1
Napper Tenders	440	19.3	0.2
Needle-Felt-Making Machine and/or Needle Loom Operators	140	17.6	0.1
Opener and/or Waste-Machine Tenders	660	8.6	0.3
Picker Tenders	420	14.0	0.2
Quilling-Machine Operators	240	23.0	0.1
Rubber-Covering-Machine Operators	490	15.2	0.2
Seamless-Hosiery Knitters	2,450	21.2	1.2
Skein-Yarn Dyers	250	27.2	0.1
Slasher Tenders	710	5.5	0.3
Slubber Tenders	1,720	7.2	0.8
Smash Hands	400	7.5	0.2
Speeder Tenders	220	27.2	0.1
Spinners, Frame	8,170	5.5	3.9
Staple Cutters and/or Staple-Processing-Machine Operators	150	22.2	0.1
Tenter-Frame Operators	1,230	15.9	0.6
Testers	1,380	14.4	0.7
Threaders, Knit Goods	200	27.9	0.1
Twister Tenders	4,080	7.2	2.0
Warp-Knitting Machine Operators	730	27.7	0.3
Warp-Tying Machine Tenders	380	7.7	0.2
Winder Operators, Automatic	6,460	6.8	3.1
Texturizers and/or Crimp Setters	2,420	25.3	1.2
Yarn Winders	5,840	10.1	2.8
Cloth Graders	2,100	8.5	1.0
Hand Folders	3,200	12.1	1.5
Folding Machine Operators	330	26.7	0.2
Cutters, Machine	630	17.3	0.3
Autoclave Operators	180	16.1	0.1
Drier Operators, Textile	530	15.0	0.3
Screen or Stencil Printers and/or Setters	240	19.8	0.1
Mixer/Blenders, Chemical	1,000	8.9	0.5
Other Skilled Workers	1,360	N.A.	0.7
Other Semiskilled Workers	10,700	N.A.	5.1

TEXTILE MILL PRODUCTS
(SIC 22, EXCEPT 221)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Other Unskilled Workers	12,820	N.A.	6.2
Clerical Workers	17,320	N.A.	8.3
Supervisors	1,120	13.8	0.5
Office Machine Operators	1,110	N.A.	0.5
Bookkeeping and/or Billing Machine Operators	130	11.9	0.1
Computer Operators	390	10.9	0.2
Keypunch Operators	520	8.4	0.3
Other Office Machine Operators	70	N.A.	0.1
Stenographers	120	19.0	0.1
Accounting Clerks	710	9.4	0.3
Bookkeepers, Hand	130	12.3	0.1
File Clerks	210	12.6	0.1
General Office Clerks	1,960	8.0	0.9
Order Clerks	440	8.6	0.2
Payroll and/or Timekeeping Clerks	790	4.9	0.4
Personnel Clerks	440	5.8	0.2
Procurement Clerks	140	8.8	0.1
Secretaries	1,250	12.4	0.6
Statistical Clerks	200	11.1	0.1
Switchboard Operators/Receptionists	310	5.4	0.1
Typists	430	9.6	0.2
Production Clerks and/or Coordinators	980	6.1	0.5
Shipping Packers	2,810	8.5	1.3
Shipping and Receiving Clerks	1,440	5.8	0.7
Weighers, Recordkeeping	210	18.2	0.1
Stock Clerks, Stockroom and Warehouse	1,110	7.0	0.5
Other Clerical Workers	1,410	N.A.	0.7
Sales Workers	1,250	N.A.	0.6
Sales Representatives	1,130	25.1	0.5
Sales Clerks	120	25.4	0.1

APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS
(SIC 23)

This major group includes those establishments primarily engaged in producing clothing and fabricating products by cutting and sewing purchased woven or knit textile fabrics. Other materials in clothing making such as leather, rubber, plastics, and furs are included in this group.

The largest size class accounts for nearly 85 percent of the employment. The following table shows the percent distribution of establishments and employment by establishment size.

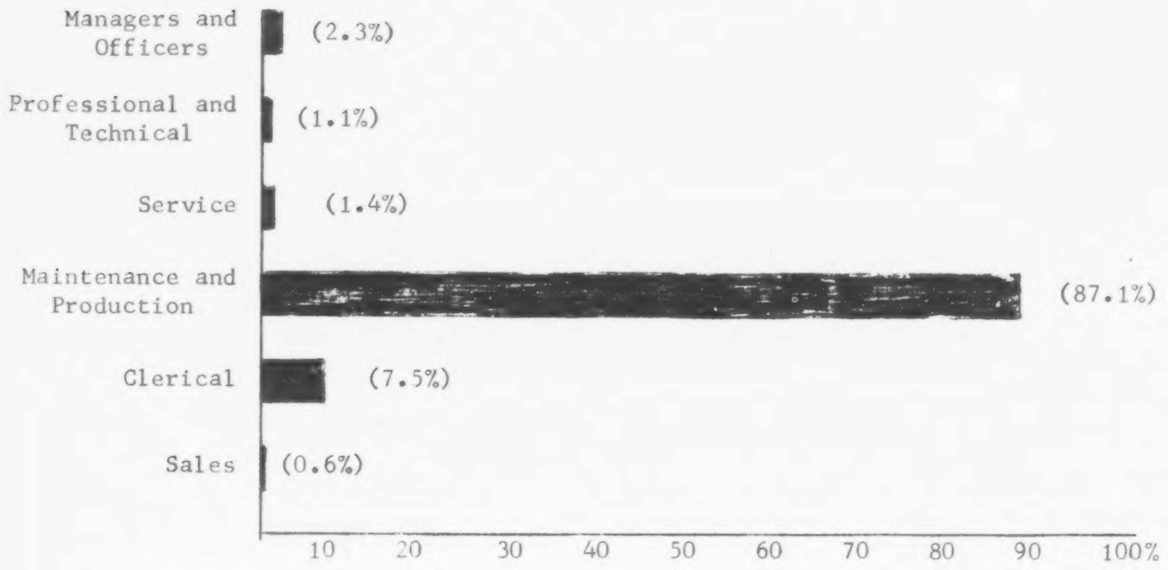
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	25.0	1.4
20 - 49 employees	15.0	4.1
50 - 99 employees	17.2	10.1
100 or more employees	42.8	84.4

Listed in the following table are the ten specific occupations in this particular industry in which the most workers were employed in May, 1980. These occupations accounted for 68 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Sewing Machine Operators, Regular Equipment-Garment	38,580	43.7
Sewing Machine Operators, Special Equipment-Garment	4,240	4.8
Inspectors	3,260	3.7
Sewing Machine Operators, Regular Equipment-Nongarment	2,860	3.2
Hand Folders	2,440	2.8
Supervisors	2,390	2.7
Managers and Officers	2,030	2.3
Sewing Machine Operators, Special Equipment-Nongarment	1,470	1.7
Markers	1,430	1.6
Shipping Packers	1,330	1.5

The table below illustrates the employment by major occupational group.

PERCENT DISTRIBUTION OF APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND
SIMILAR MATERIALS EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN
NORTH CAROLINA, MAY, 1930



APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS
(SIC 23)
May, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	88,110	N.A.	100.0
Managers and Officers	2,030	5.1	2.3
Professional and Technical Workers	930	N.A.	1.1
Engineers	240	N.A.	0.3
Industrial Engineers	190	7.2	0.2
Mechanical Engineers	50	17.5	0.1
Purchasing Agents and/or Buyers	90	11.4	0.1
Accountants and Auditors	120	9.1	0.1
Personnel and Labor Relations Specialists	130	6.9	0.1
Designers	80	13.7	0.1
Other Professional Workers	80	N.A.	0.1
Computer Programmers	80	7.6	0.1
Engineering Technicians	80	9.7	0.1
Other Technicians	30	N.A.	0.1
Service Workers	1,260	N.A.	1.4
Service Supervisors	220	10.8	0.3
Janitors, Porters, and Cleaners	880	3.7	1.0
Guards and Doorkeepers	110	15.4	0.1
Other Service Workers	50	N.A.	0.1
Maintenance and Production Workers	76,740	N.A.	87.1
Supervisors	2,390	3.2	2.7
Mechanics and Repairers	1,250	N.A.	1.4
Maintenance Mechanics	130	10.6	0.1
Sewing Machine Mechanics	920	3.9	1.0
Other Mechanics and Repairers	200	N.A.	0.2
Hand Pressers	1,070	13.6	1.2
Machine Pressers	1,100	13.2	1.2
Truck Drivers	210	8.4	0.2
Carpenters	50	8.1	0.1
Electricians	70	7.4	0.1
Industrial Truck Operators	150	11.1	0.2
Inspectors	3,260	5.0	3.7
Instructors, Apparel and Textile Machines	280	10.8	0.3
Machinists	90	15.6	0.1
Maintenance Repairers, General Utility	200	12.9	0.2
Trades Helpers	70	34.5	0.1
Order Fillers	580	11.8	0.7
Production Packagers	1,090	8.3	1.2
Sewing Machine Operators, Regular Equipment - Garment	38,580	2.5	43.7

APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS
(SIC 23)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Sewing Machine Operators, Special Equipment - Garment	4,240	14.0	4.8
Sewing Machine Operators, Regular Equipment - Nongarment	2,860	19.6	3.2
Sewing Machine Operators, Special Equipment - Nongarment	1,470	18.9	1.7
Bundlers	1,240	5.4	1.4
Cloth Printers	100	26.8	0.1
Cutters, Portable Machine	620	8.3	0.7
Die Cutters	190	10.9	0.2
Fusing Machine Operators	140	15.7	0.2
Garment Repairers	340	9.9	0.4
Knitting Machine Operators	310	17.4	0.4
Belt Makers, Apparel	50	22.2	0.1
Pattern Cutters	70	12.7	0.1
Patternmakers	80	13.0	0.1
Pleating Machine Operators	310	16.7	0.4
Sample Makers	220	10.8	0.3
Shapers and Pressers	170	31.3	0.2
Slitting Machine Operators	250	19.7	0.3
Spot Cleaners	130	13.1	0.1
Spreaders	940	6.1	1.1
Testers	80	14.1	0.1
Thread Trimmers	700	12.8	0.8
Work Distributors	1,430	6.5	1.6
Markers	220	7.3	0.2
Cutters, Hand	540	9.8	0.6
Turners	710	8.5	0.8
Folders, Hand	2,440	8.1	2.8
Folding Machine Operators	100	27.1	0.1
Soabar Operators	150	10.2	0.2
Gluers and/or Cementers, Hand	70	23.3	0.1
Cutters, Machine	380	13.8	0.4
Other Skilled Workers	220	N.A.	0.2
Other Semiskilled Workers	2,380	N.A.	2.7
Other Unskilled Workers	3,150	N.A.	3.6
Clerical Workers	6,640	N.A.	7.5
Supervisors	290	9.3	0.3
Office Machine Operators	420	N.A.	0.5
Bookkeeping and/or Billing Machine Operators	50	17.9	0.1
Computer Operators	110	8.4	0.1
Keypunch Operators	260	18.4	0.3
Accounting Clerks	370	14.0	0.4
Bookkeepers, Hand	90	19.5	0.1

APPAREL AND OTHER FINISHED PRODUCTS MADE FROM FABRICS AND SIMILAR MATERIALS
(SIC 23)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
File Clerks	50	16.9	0.1
General Office Clerks	700	7.2	0.8
Order Clerks	290	15.9	0.3
Payroll and/or Timekeeping Clerks	480	4.8	0.5
Personnel Clerks	120	7.0	0.1
Procurement Clerks	60	9.5	0.1
Receptionists	50	15.3	0.1
Secretaries	260	8.9	0.3
Switchboard Operators/Receptionists	110	7.5	0.1
Typists	90	12.2	0.1
Production Clerks and/or Coordinators	280	10.0	0.3
Shipping Packers	1,330	6.5	1.5
Shipping and Receiving Clerks	580	5.9	0.7
Stock Clerks, Stockroom and Warehouse	490	7.0	0.6
Shade-Ticket Markers	210	11.8	0.2
Other Clerical Workers	370	N.A.	0.4
Sales Workers	510	N.A.	0.6
Sales Representatives	340	15.0	0.4
Sales Clerks	170	15.4	0.2

LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE
(SIC 24)

Establishments in this group are primarily engaged in cutting timber and pulpwood; sawmills, lath mills, shingle mills, cooperage stock mills, planing mills, plywood mills, and veneer mills. Also included in this category are establishments that manufacture finished articles made entirely or mainly of wood or wood substitutes.

Nearly 80 percent of the firms in this group are in the smallest size class. Below is a table which shows the percent distribution of establishments and employment by establishment size in this group.

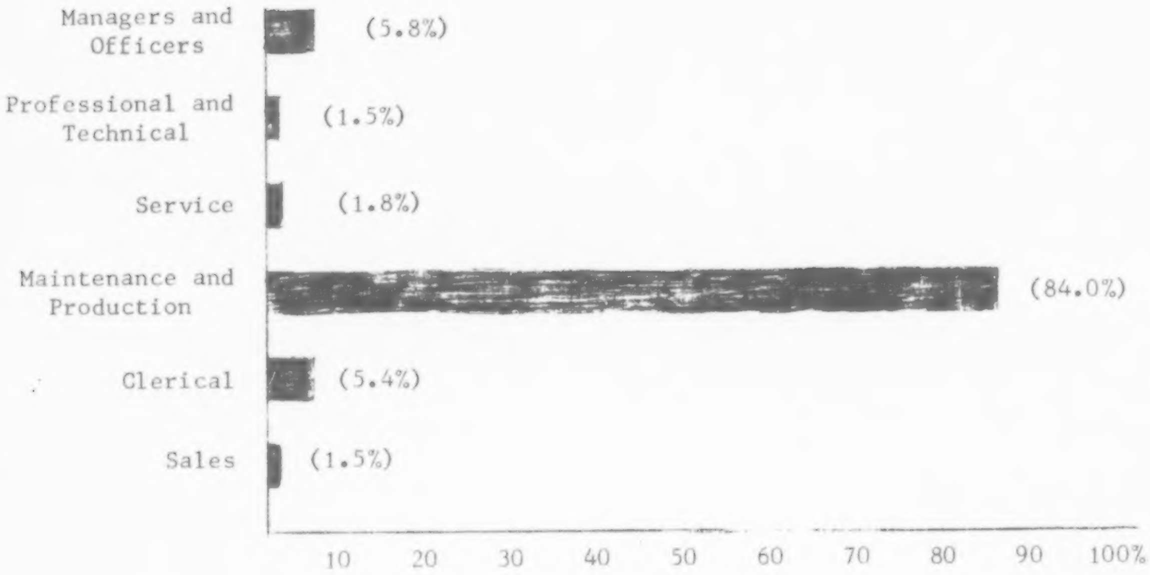
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	79.8	26.2
20 - 49 employees	11.8	19.4
50 - 99 employees	4.8	17.9
100 or more employees	3.6	36.5

The ten specific occupations in which the most workers were employed in May, 1980 are shown in the following table. These occupations had 33.6 percent of the group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Managers and Officers	2,020	5.8
Assemblers	1,920	5.5
Truck Drivers	1,460	4.1
Fallers and/or Buckers	1,390	4.0
Chain Offbearers, Lumber	1,290	3.7
Offbearers	1,190	3.4
Logging Tractor Operators	1,080	3.1
Supervisors	910	2.6
Industrial Truck Drivers	800	2.3
Wood Sanders	750	2.1

The following graph illustrates the employment by major occupational group.

PERCENT DISTRIBUTION OF LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, MAY, 1980



LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE
(SIC 24)
May, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	35,070	N.A.	100.0
Managers and Officers	2,020	3.2	5.8
Professional and Technical Workers	520	N.A.	1.5
Engineers	40	N.A.	0.1
Purchasing Agents and/or Buyers	60	6.9	0.2
Accountants and Auditors	160	10.8	0.4
Personnel and Labor Relations Specialists	20	9.8	0.1
Other Professional Workers	40	N.A.	0.1
Drafters	40	23.1	0.1
Timber Cruisers	100	20.4	0.3
Other Technical Workers	60	N.A.	0.2
Service Workers	640	N.A.	1.8
Service Supervisors	30	22.1	0.1
Janitors, Porters, and Cleaners	350	6.1	1.0
Guards and Doorkeepers	260	7.8	0.7
Maintenance and Production Workers	29,470	N.A.	84.0
Supervisors	910	4.0	2.6
Mechanics and Repairers	410	N.A.	1.1
Automotive Mechanics	110	13.1	0.3
Engineering - Equipment Mechanics	50	25.5	0.1
Maintenance Mechanics	210	10.7	0.6
Other Mechanics and Repairers	40	32.0	0.1
Truck Drivers	1,460	4.1	4.1
Cabinetmakers	300	14.7	0.9
Carpenters	520	15.4	1.5
Delivery and Route Workers	90	19.1	0.3
Electricians	140	8.9	0.4
Industrial Truck Drivers	800	5.8	2.3
Inspectors	270	12.1	0.8
Machinists	40	28.3	0.1
Maintenance Repairers, General Utility	490	6.9	1.4
Trades Helpers	590	13.1	1.7
Millwrights	80	30.1	0.2
Order Fillers	30	15.6	0.1
Plumbers and/or Pipefitters	60	12.9	0.2
Production Packagers	290	14.2	0.8
Stationary Boiler Firers	150	10.1	0.4
Logging Tractor Operators	1,080	6.0	3.1
Welders and Flamecutters	70	10.1	0.2
Power-Barker Operators	310	7.9	0.9
Band-Scroll Saw Operators	60	19.6	0.2
Boring-Machine Operators	110	20.0	0.3

LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE
(SIC 24)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Carrier Drivers	60	21.2	0.2
Chain Offbearers, Lumber	1,290	7.4	3.7
Chasers	60	21.4	0.2
Chippers	200	10.8	0.6
Choker Setters, Lumber	150	16.5	0.4
Auto Clippers, Veneer	240	10.4	0.7
Cut-Off-Saw Operators, Lumber	560	6.7	1.6
Cut-Off-Sawyers, Log	30	34.0	0.1
Edge Gluers	90	22.6	0.3
Edgers, Automatic and/or Pony	480	7.9	1.4
Fallers and/or Buckers	1,390	6.8	4.0
Gang Sawyers	20	18.0	0.1
Gluing-Machine Operators	90	17.2	0.3
Head Loaders	90	14.3	0.3
Head Sawyers	480	6.5	1.4
Hot-Plate Press Operators	80	16.5	0.2
Hydraulic Press Operators, Veneer	30	25.6	0.1
Lay-Out Markers, Wood	30	26.5	0.1
Kiln Operators, Lumber	50	16.9	0.1
Lathe Operators, Wood	50	31.1	0.1
Loaders, Car and Truck	440	14.2	1.3
Loader Engineers	230	8.5	0.7
Log Handling Equipment Operators	390	7.9	1.1
Log Inspectors, Graders, and/or Scalers	200	10.1	0.6
Lumber Graders	240	9.1	0.7
Lumber Straighteners	300	12.0	0.9
Machine Setters, Woodworking	180	13.9	0.5
Wood Machinists	530	14.3	1.5
Nailing Machine Operators	280	10.1	0.8
Off-Bearers	1,190	7.4	3.4
Resawyers	180	12.2	0.5
Rigging Slingers	60	25.3	0.2
Ripsaw Operators	580	7.2	1.7
Wood Sanders	750	10.5	2.1
Saw Filers	150	10.3	0.4
Second Loaders	30	25.4	0.1
Shapers and/or Routers	160	17.2	0.4
Kiln Stacker Operators	60	11.8	0.2
Tenoner Operators	60	16.9	0.2
Testers	30	29.2	0.1
Transfer Controllers	20	24.1	0.1
Trim Saw Operators	350	8.9	1.0
Variety Saw Operators	230	11.5	0.7
Veneer Driers	140	10.7	0.4
Veneer Graders	340	11.9	0.9
Veneer-Lathe Operators	60	14.4	0.2

LUMBER AND WOOD PRODUCTS, EXCEPT FURNITURE
(SIC 24)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Veneer Sanders	60	22.1	0.2
Woodworking-Machine Operators	570	11.3	1.6
Yarder Engineers	70	25.2	0.2
Production Painters	300	18.7	0.9
Conveyor Operators or Tenders	30	26.5	0.1
Veneer Drier Feeders	210	8.8	0.6
Veneer Jointer Operators	60	21.6	0.2
Veneer Repairers, Hand	30	34.1	0.1
Core Feeders	70	13.8	0.2
Core Layers and/or Sheet Turners	170	11.6	0.5
Planer Operators	250	11.9	0.7
Sorter Operators, Green Lumber	50	9.2	0.1
Gluers and/or Cementers, Hand	80	24.7	0.2
Assemblers	1,920	7.6	5.5
Mixers and/or Blenders, Chemical	30	18.6	0.1
Other Skilled Workers	170	N.A.	0.5
Other Semiskilled Workers	1,680	N.A.	4.8
Other Unskilled Workers	2,810	N.A.	8.0
Clerical Workers	1,900	N.A.	5.4
Supervisors	20	15.8	0.1
Office Machine Operators	60	N.A.	0.2
Computer Operators	20	13.2	0.1
Keypunch Operators	20	5.6	0.1
Other Machine Operators	20	N.A.	0.1
Accounting Clerks	100	9.3	0.3
Bookkeepers, Hand	300	8.0	0.9
General Office Clerks	380	6.5	1.1
Payroll and/or Timekeeping Clerks	50	14.4	0.1
Secretaries	320	7.5	0.9
Switchboard Operators/Receptionists	30	7.2	0.1
Production Clerks and/or Coordinators	80	24.1	0.2
Shipping Packers	270	8.9	0.8
Shipping and Receiving Clerks	60	9.1	0.2
Stock Clerks, Stockroom and Warehouse	60	13.1	0.2
Other Clerical Workers	170	N.A.	0.5
Sales Workers	520	N.A.	1.5
Sales Representatives	490	5.7	1.4
Other Sales Workers	30	N.A.	0.1

FURNITURE AND FIXTURES
(SIC 25, EXCEPT 259)

Establishments in this group are engaged in the manufacture of household, office, public building, and restaurant furniture; and office and store fixtures. This group does not include hospital, laboratory, beauty, or barber shop furniture makers.

The following table shows the percent distribution of establishments and employment by establishment size. The largest size class accounts for 86 percent of the employment although the smallest size class accounts for 39 percent of the firms.

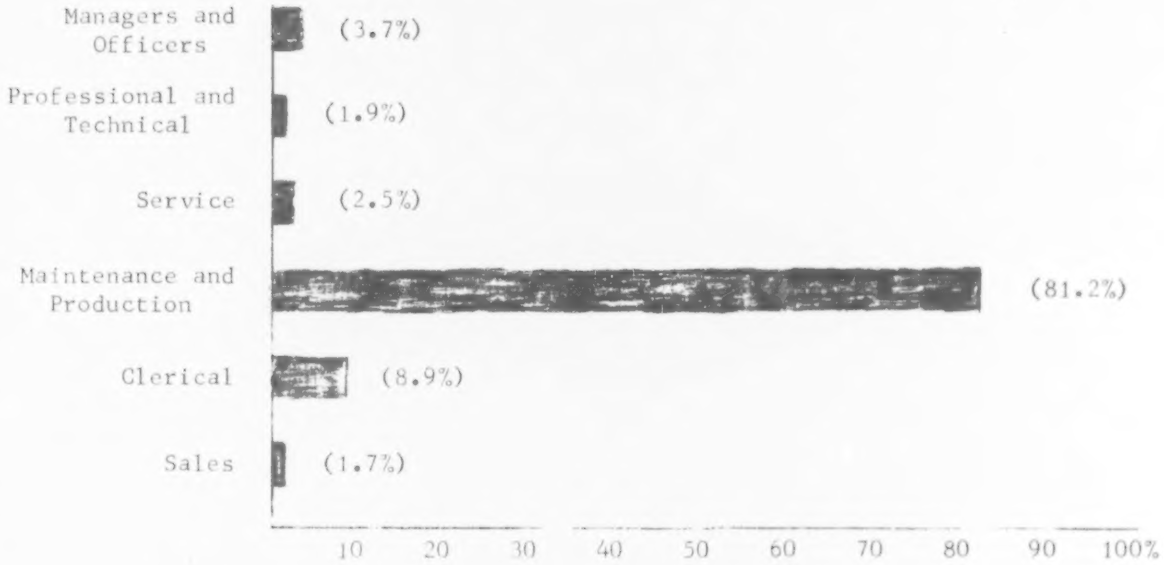
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	39.0	2.0
20 - 49 employees	18.5	4.5
50 - 99 employees	13.7	7.2
100 or more employees	28.8	86.3

The following table lists the ten specific occupations in this group in which the most workers were employed as of June, 1980. These occupations had nearly 42 percent of the total employment in the furniture and fixtures group.

Occupation	Estimated Industry Employment	Percent Distribution
Assemblers	6,860	8.3
Upholsterers	4,600	5.6
Sewing Machine Operators, Regular Equipment-Nongarment	4,040	4.9
Wood Sanders	3,390	4.1
Managers and Officers	3,040	3.7
Supervisors	3,010	3.7
Rubbers	2,880	3.5
Off-bearers	2,810	3.4
Upholsterer Cutters	2,010	2.5
Production Packagers	1,690	2.1

Illustrated in the following graph is employment by the major occupational groups.

PERCENT DISTRIBUTION OF FURNITURE AND FIXTURES EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, JUNE, 1980



FURNITURE AND FIXTURES
(SIC 25, EXCEPT 259)
June, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	82,150	N.A.	100.0
Managers and Officers	3,040	8.7	3.7
Professional and Technical Workers	1,550	N.A.	1.9
Engineers	270	N.A.	0.3
Industrial Engineers	230	15.3	0.3
Mechanical Engineers	40	16.5	0.1
Purchasing Agents and/or Buyers	210	9.5	0.3
Accountants and Auditors	270	17.1	0.3
Personnel and Labor Relations Specialists	220	7.6	0.3
Designers	150	14.0	0.2
Other Professional Workers	140	N.A.	0.2
Computer Programmers	120	13.3	0.1
Drafters	90	13.7	0.1
Other Technicians	80	N.A.	0.1
Service Workers	2,080	N.A.	2.5
Supervisors	340	20.1	0.4
Janitors, Porters, and Cleaners	760	7.8	0.9
Guards and Doorkeepers	460	8.0	0.6
Other Service Workers	520	N.A.	0.6
Maintenance and Production Workers	66,740	N.A.	81.2
Supervisors	3,010	3.8	3.7
Mechanics and Repairers	300	N.A.	0.4
Automotive Mechanics	80	20.9	0.1
Maintenance Mechanics	180	11.2	0.2
Other Mechanics and Repairers	40	N.A.	0.1
Truck Drivers	1,0[illegible]0	12.4	1.3
Cabinetmakers	390	13.2	0.5
Delivery and Route Workers	100	34.9	0.1
Electricians	100	8.2	0.1
Filers, Grinders, and Buffers	350	15.6	0.4
Industrial Truck Operators	710	8.7	0.9
Inspectors	1,430	7.3	1.7
Laminating Machine Operators, Furniture	90	21.4	0.1
Machinists	150	15.0	0.2
Maintenance Repairers, General Utility	710	9.2	0.9
Trades Helpers	670	23.2	0.8
Order Fillers	180	19.2	0.2
Production Packagers	1,690	7.7	2.1
Sewing Machine Operators, Regular Equipment - Nongarment	4,040	9.3	4.9
Stationary Boiler Firers	160	20.8	0.2

FURNITURE AND FIXTURES
(SIC 25, EXCEPT 259)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Welders and Flamecutters	390	34.4	0.5
Furniture Finishers	1,070	14.6	1.3
Band-Scroll Saw Operators	520	17.3	0.6
Boring-Machine Operators	760	16.7	0.9
Wood-Carving-Machine Operators	180	12.6	0.2
Cut-Off-Saw Operators, Lumber	630	14.8	0.8
Dado Operators	100	13.6	0.1
Dowel Machine Operators	160	30.4	0.2
Drill-Press Operators	50	21.9	0.1
Gluing Machine Operators	390	7.8	0.5
Grinding Machine Operators, Metal	90	13.5	0.1
Hot Plate Press Operators	90	12.5	0.1
Hydraulic Press Operators, Veneer	130	16.1	0.2
Lay-Out Markers, Wood	260	20.3	0.3
Lathe Operators, Wood	260	10.8	0.3
Machine-Setters, Woodworking	760	12.5	0.9
Wood Machinists	360	23.7	0.4
Mortising-Machine Operators	180	24.3	0.2
Nailing-Machine Operators	440	13.9	0.5
Off-Bearers	2,810	6.7	3.4
Patternmakers	90	22.8	0.1
Plastic-Top Installers	70	20.1	0.1
Power-Screwdriver Operators	500	12.8	0.6
Rip-Groove Machine Operators	100	17.6	0.1
Ripsaw Operators	950	14.7	1.2
Rubbers	2,880	13.4	3.5
Wood Sanders	3,390	8.2	4.1
Shapers, Hand	180	10.5	0.2
Shapers and/or Routers	670	7.7	0.8
Sorters, Upholstery Parts	440	19.4	0.5
Spring-Machine Operators	110	34.4	0.1
Springers	1,320	13.9	1.6
Tenoner Operators	430	14.3	0.5
Testers	110	24.6	0.1
Upholstery Trimmers	870	19.7	1.1
Variety Saw Operators	420	10.0	0.5
Woodworking-Machine Operators	1,040	11.4	1.3
Production Painters	1,680	7.3	2.0
Upholsterers	4,600	9.5	5.6
Upholsterer Cutters	2,010	10.5	2.5
Power Brake and/or Bending Machine Operators	60	28.0	0.1
Gluers and/or Cementers, Hand	670	11.8	0.8
Cushion Makers	750	15.0	0.9
Assemblers	6,860	6.4	8.3
Decorators, Hand	210	14.1	0.3
Other Skilled Workers	1,710	N.A.	2.1

FURNITURE AND FIXTURES
(SIC 25, EXCEPT 259)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Other Semiskilled Workers	4,280	N.A.	5.2
Other Unskilled Workers	5,590	8.7	6.8
Clerical Workers	7,340	N.A.	8.9
Supervisors	300	31.1	0.4
Office Machine Operators	390	N.A.	0.5
Computer Operators	130	17.1	0.2
Keypunch Operators	180	9.3	0.2
Other Office Machine Operators	80	N.A.	0.1
Stenographers	90	16.6	0.1
Accounting Clerks	290	15.8	0.4
Bookkeepers, Hand	160	25.8	0.2
File Clerks	200	17.2	0.2
General Office Clerks	940	9.3	1.1
Order Clerks	330	16.0	0.4
Payroll and/or Timekeeping Clerks	260	13.4	0.3
Personnel Clerks	150	8.9	0.2
Procurement Clerks	110	27.2	0.1
Secretaries	450	15.4	0.5
Statistical Clerks	60	26.6	0.1
Switchboard Operators/Receptionists	170	14.1	0.2
Typists	220	16.9	0.3
Production Clerks and/or Coordinators	400	9.9	0.5
Shipping Packers	1,250	10.7	1.5
Shipping and Receiving Clerks	630	8.3	0.8
Stock Clerks, Stockroom and Warehouse	530	25.7	0.6
Other Clerical Workers	410	N.A.	0.5
Sales Workers	1,400	N.A.	1.7
Sales Representatives	1,400	16.7	1.7

PAPER AND ALLIED PRODUCTS
(SIC 26, EXCEPT 261)

This major grouping includes those establishments primarily engaged in the manufacture of pulps from wood, cellulose fibers, and rags; the manufacture of paper and paperboard into converted products such as paper bags, boxes, and envelopes. It does not include abrasive paper, carbon paper, photosensitized or blueprint paper.

The following table shows the percent distribution of establishments and employment by establishment size. Firms in this group show a fairly uniform distribution among size classes; however, the largest size class accounts for 82 percent of the employment.

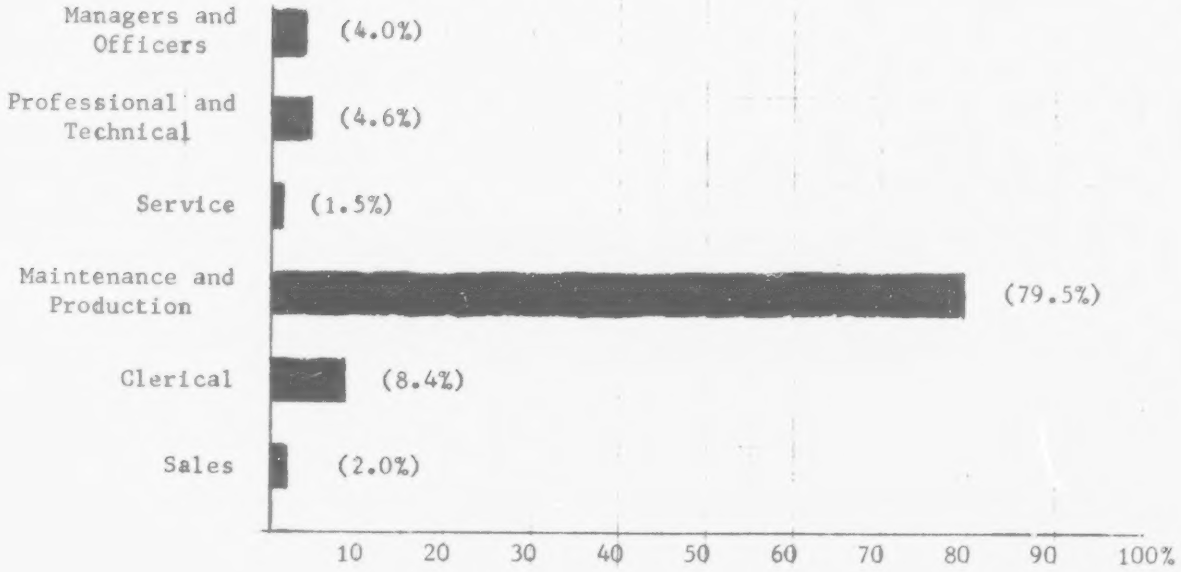
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	32.1	2.3
20 - 49 employees	23.0	6.2
50 - 99 employees	16.4	9.3
100 or more employees	28.5	82.2

The following table lists the ten specific occupations of this industry in which the most workers were employed in April, 1980. These occupations had 25 percent of the total employment for this group.

Occupation	Estimated Industry Employment	Percent Distribution
Supervisors	1,040	4.9
Managers and Officers	840	4.0
Slitting Machine Operators	580	2.7
Industrial Truck Drivers	550	2.6
Press Operators and/or Plate Printers	440	2.1
Production Packagers	440	2.1
Sales Representatives	430	2.0
Millwrights	370	1.7
Truck Drivers	350	1.6
Paper Reel or Rewinder Operators	280	1.4

Below is a graph which illustrates employment by the major occupational group.

PERCENT DISTRIBUTION OF PAPER AND ALLIED PRODUCTS EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, APRIL, 1980



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PAPER AND ALLIED PRODUCTS
(SIC 26, EXCEPT 261)
April, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	21,080	N.A.	100.0
Managers and Officers	840	6.8	4.0
Professional and Technical Workers	960	N.A.	4.6
Engineers	240	N.A.	1.1
Chemical Engineers	50	21.8	0.3
Electrical and Electronic Engineers	20	11.8	0.1
Industrial Engineers	40	9.0	0.2
Mechanical Engineers	50	22.0	0.2
Other Engineers	80	23.7	0.4
Chemists	40	10.9	0.2
Systems Analysts	20	33.7	0.1
Purchasing Agents and/or Buyers	50	9.6	0.3
Accountants and Auditors	120	12.0	0.6
Personnel and Labor Relations Specialists	120	18.1	0.6
Designers	20	19.7	0.1
Other Professional Workers	160	N.A.	0.8
Computer Programmers	40	23.7	0.2
Drafters	20	16.1	0.1
Other Engineering Technicians	50	N.A.	0.3
Other Technicians	80	N.A.	0.4
Service Workers	320	N.A.	1.5
Supervisors	90	18.6	0.4
Janitors, Porters, and Cleaners	150	8.0	0.7
Guards and Doorkeepers	60	8.7	0.3
Other Service Workers	20	N.A.	0.1
Maintenance and Production Workers	16,760	N.A.	79.5
Supervisors	1,040	4.1	4.9
Mechanics and Repairers	310	N.A.	1.5
Automotive Mechanics	60	8.7	0.3
Maintenance Mechanics	250	19.3	1.2
Truck Drivers	350	12.6	1.6
Carpenters	40	7.7	0.2
Delivery and Route Workers	70	20.6	0.3
Electricians	260	4.6	1.2
Industrial Truck Operators	550	6.3	2.6
Instrument Repairers	120	11.5	0.6
Machinists	120	11.5	0.6
Maintenance Repairers, General Utility	190	14.6	0.9
Millwrights	370	10.1	1.7
Oilers	80	11.5	0.4
Order Fillers	130	17.6	0.6

PAPER AND ALLIED PRODUCTS
(SIC 26, EXCEPT 261)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Maintenance Painters	50	6.1	0.2
Plumbers and/or Pipefitters	220	9.7	1.1
Press Operators and/or Plate Printers	440	15.5	2.1
Production Packagers	440	15.1	2.1
Scrappers and/or Strippers	150	18.3	0.7
Stationary Boiler Firers	140	12.1	0.7
Welders and Flamecutters	110	18.4	0.5
Back Tenders	150	12.9	0.7
Beater Engineers	50	12.2	0.2
Beaters	40	22.4	0.2
Box Makers, Paperboard	190	21.5	0.9
Carton-Forming-Machine Operators	40	32.1	0.2
Chemical Operators A	60	19.1	0.3
Corner Cutters	20	33.9	0.1
Corrugator-Knife Operators	40	13.3	0.2
Corrugator Operators	80	20.4	0.4
Cutting and Creasing Press Operators	90	21.3	0.4
Cylinder-Machine Tenders	40	25.2	0.2
Die Cutters	100	15.8	0.5
Die Makers	40	17.6	0.2
Die Mounters	40	19.3	0.2
Digester Operators	60	9.4	0.3
Digester-Operator Helpers	110	8.5	0.5
Evaporator Operators, Paper	30	8.2	0.1
Flexo-Folder-Gluer Operators	100	15.4	0.5
Fourdrinier-Machine Tenders	130	14.7	0.6
Wood Grinder Operators	40	32.3	0.2
Layboy Tenders	30	31.1	0.2
Machine Setters, Paper Goods	160	26.8	0.8
Paper Reel or Rewinder Operators	280	33.9	1.4
Printer-Slotter Operators	180	12.3	0.8
Printer-Slotter Feeders	120	17.3	0.6
Scorers	40	23.7	0.2
Slitter-Creaser-Slotter Operators	20	30.9	0.1
Slitter-Scorer-Cut-Off Operators	20	32.0	0.1
Slitting-Machine Operators	580	24.0	2.7
Stapling-Machine Operators	40	26.9	0.2
Taping-Machine Operators	110	17.9	0.5
Testers	170	12.0	0.8
Waxing Machine Operators	20	22.4	0.1
Winders, Paper Machine	100	5.4	0.5
Wrapping-Machine Operators	110	29.1	0.5
Conveyor Operators and/or Tenders	70	22.7	0.3
Fourth and/or Fifth Hands, Paper Machine	100	20.6	0.5
Bailing-Machine Operators	140	8.8	0.7

PAPER AND ALLIED PRODUCTS
(SIC 26, EXCEPT 261)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Cutters, Machine	90	15.9	0.4
Mixers and/or Blenders, Chemical	60	31.4	0.3
Other Skilled Workers	870	N.A.	4.1
Other Semiskilled Workers	3,740	N.A.	17.7
Other Unskilled Workers	3,080	N.A.	14.6
Clerical Workers	1,770	N.A.	8.4
Supervisors	90	14.7	0.4
Office Machine Operators	120	N.A.	0.6
Bookkeeping and/or Billing Machine Operators	40	21.8	0.2
Computer Operators	40	10.4	0.2
Keypunch Operators	40	10.3	0.2
Accounting Clerks	130	11.0	0.6
General Office Clerks	120	15.0	0.5
Order Clerks	60	20.9	0.3
Payroll and/or Timekeeping Clerks	60	17.7	0.3
Personnel Clerks	40	8.1	0.2
Procurement Clerks	20	12.4	0.1
Secretaries	230	8.4	1.1
Statistical Clerks	30	21.4	0.1
Switchboard Operators/Receptionists	40	19.7	0.2
Typists	40	20.7	0.2
Box Estimators, Paperboard Products	40	14.1	0.2
Production Clerks and/or Coordinators	120	12.5	0.6
Shipping and Receiving Clerks	130	14.1	0.6
Stock Clerks, Stockroom and Warehouse	60	16.2	0.3
Other Clerical Workers	440	N.A.	2.1
Sales Workers	430	N.A.	2.0
Sales Representatives	430	2.0	2.0

PRINTING, PUBLISHING, AND ALLIED INDUSTRIES
(SIC 27)

Establishments included in this group print by one or more common processes; also included are firms that perform services for the printing trade, such as bookbinding, engraving, etc. Establishments that are engaged in publishing newspapers, books, and periodicals, regardless of whether or not they print their own materials are also included in this group.

The smallest size class accounts for 78 percent of the firms; however, nearly 50 percent of the employment is in the largest size class. The following table shows the percent distribution of establishments and employment by establishment size.

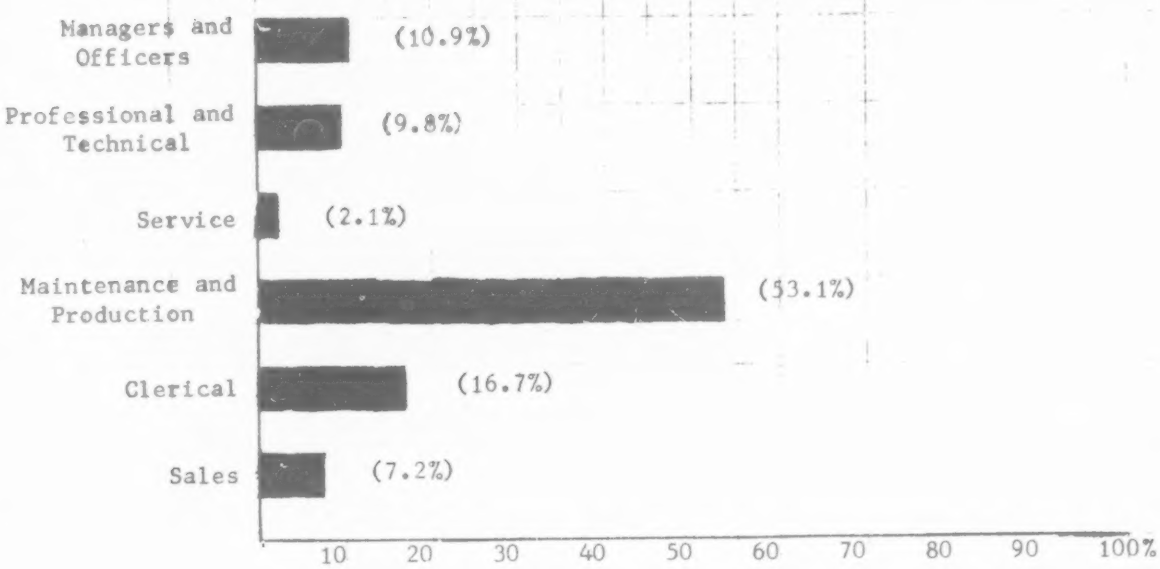
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	77.8	19.0
20 - 49 employees	12.3	16.1
50 - 99 employees	5.8	17.2
100 or more employees	4.1	47.7

The ten specific occupations in the printing trades group in which the most workers were employed in May, 1980 are listed in the following table. These occupations had 43 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Managers and Officers	2,240	10.9
Offset Lithographic Press Operators	1,290	6.3
Sales Representatives	1,200	5.8
Letter Press Operators, Sheet, Roll, or Web Feed	720	3.5
Reporters and Correspondents	710	3.4
Bindery Workers, Assembly	640	3.1
Pasteup Men/Women	540	2.6
Strippers	530	2.6
Writers and/or Editors	530	2.6
Secretaries	470	2.3

The following graph illustrates employment by the major occupational groups.

PERCENT DISTRIBUTION OF PRINTING, PUBLISHING, AND ALLIED INDUSTRIES EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, MAY, 1980



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PRINTING, PUBLISHING, AND ALLIED INDUSTRIES
(SIC 27)
May, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	20,550	N.A.	100.0
Managers and Officers	2,240	2.5	10.9
Professional and Technical Workers	2,020	N.A.	9.8
Photographers	120	4.9	0.6
Purchasing Agents and Buyers	40	9.4	0.2
Accountants and Auditors	40	11.1	0.2
Commercial Artists	140	10.0	0.7
Writers and/or Editors	530	7.1	2.6
Librarians, Professional	30	16.8	0.1
Personnel and Labor Relations Specialists	20	10.6	0.1
Reporters and Correspondents	710	8.7	3.4
Designers	50	10.8	0.2
Estimators, Printing Services	60	14.3	0.3
Other Professional Workers	110	N.A.	0.5
Computer Programmers	60	21.5	0.3
Drafters	70	25.2	0.3
Electrical and Electronic Technicians	40	27.6	0.2
Service Workers	440	N.A.	2.1
Supervisors	20	19.7	0.1
Janitors, Porters, and Cleaners	280	5.8	1.4
Other Service Workers	140	N.A.	0.7
Maintenance and Production Workers	10,930	N.A.	53.1
Supervisors	470	10.3	2.3
Maintenance Mechanics	80	14.8	0.4
Developers and/or Projection Printers	30	19.1	0.1
Truck Drivers	90	28.4	0.4
Delivery and Route Workers	460	8.5	2.2
Industrial Truck Operators	100	17.1	0.5
Inspectors	160	20.7	0.8
Machinists	20	22.8	0.1
Maintenance Repairers, General Utility	60	17.2	0.3
Order Fillers	80	27.3	0.4
Production Packagers	160	15.0	0.8
Offset Lithographic Press Operators	1,290	6.4	6.3
Platemakers	220	10.8	1.1
Strippers	530	11.1	2.6
Camera Operators, Printing	450	6.9	2.2
Conveyor Operators and/or Tenders	30	12.9	0.1
Copy Markers	50	19.0	0.2

PRINTING, PUBLISHING, AND ALLIED INDUSTRIES
(SIC 27)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Hand Compositors	240	15.4	1.2
Imposers and Makeup Arrangers	100	20.3	0.5
Line Cast Machine Operators	140	14.5	0.7
Pasteup Men/Women	540	6.9	2.6
Phototypesetting-Machine Keyboard Operators	90	11.2	0.4
Phototypesetting-Machine Monitors	100	10.4	0.5
Phototypesetter Operators	60	14.2	0.3
Proofreaders, Composed Copy	250	10.8	1.2
Photoengravers	140	16.8	0.7
Flexographic Press Operators	80	33.8	0.4
Ink Workers	30	22.6	0.2
Letter Press Operators, Sheet, Roll, or Web Feed	720	10.3	3.5
Letterset Press Operators, Sheet, Roll, or Web Feed	110	11.9	0.5
Press Assistants and Feeders	350	17.6	1.7
Setters, Binder Machines	100	21.7	0.5
Mailers	270	7.6	1.3
Cutters, Machine	110	20.0	0.5
Bookbinders, Hand	60	25.0	0.3
Bookbinders, Machine	300	13.9	1.5
Bindery Workers, Assembly	640	14.3	3.1
Bindery Workers, Stitching	110	18.6	0.5
Other Bindery Workers	480	N.A.	2.3
Other Skilled Workers	310	N.A.	1.5
Other Semiskilled Workers	480	N.A.	2.3
Other Unskilled Workers	840	N.A.	4.1
Clerical Workers	3,440	N.A.	15.7
Supervisors	80	24.0	0.4
Office Machine Operators	210	N.A.	1.0
Bookkeeping and/or Billing Machine Operators	30	13.3	0.1
Computer Operators	30	10.2	0.2
Keypunch Operators	70	17.9	0.4
Other Office Machine Operators	80	N.A.	0.4
Accounting Clerks	180	11.1	0.6
Bookkeepers, Hand	340	8.4	1.7
Cashiers	30	12.8	0.1
File Clerks	40	17.8	0.2
General Office Clerks	380	11.2	1.8
Order Clerks	50	18.0	0.3
Payroll and/or Timekeeping Clerks	40	8.7	0.2
Personnel Clerks	20	11.5	0.1
Receptionists	20	21.2	0.1
Secretaries	440	6.3	2.1

PRINTING, PUBLISHING, AND ALLIED INDUSTRIES
(SIC 27)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Switchboard Operators	40	14.4	0.2
Switchboard Operators/Receptionists	70	8.3	0.3
Messengers	60	11.8	0.3
Typists	470	8.4	2.3
Circulation Clerks	180	18.9	0.9
Classification-Ad Clerks	50	14.1	0.3
Customer Service Representatives, Printing and Publishing	110	8.8	0.5
Telephone Ad-Takers	140	5.0	0.7
Production Clerks and/or Coordinators	80	9.2	0.4
Shipping Packers	70	16.9	0.3
Shipping and Receiving Clerks	170	10.6	0.8
Stock Clerks, Stockroom and Warehouse	20	19.6	0.1
Other Clerical Workers	150	N.A.	0.7
Sales Workers	1,480	N.A.	7.2
Sales Representatives	1,200	5.1	5.8
Other Sales Workers	280	N.A.	1.3

CHEMICALS AND ALLIED PRODUCTS
(SIC 28)

This major group includes those establishments primarily engaged in the production of products made predominantly by chemical processes. The production of basic chemicals, chemical products to be further manufactured, and finished chemical products to be used for consumption, as in soap or drugs are also included in this category.

The percent distribution of establishments and employment by establishment size are shown in the following table. As may be seen, 88 percent of the employment is in the largest size class, but nearly 50 percent of the firms are in the smallest size class.

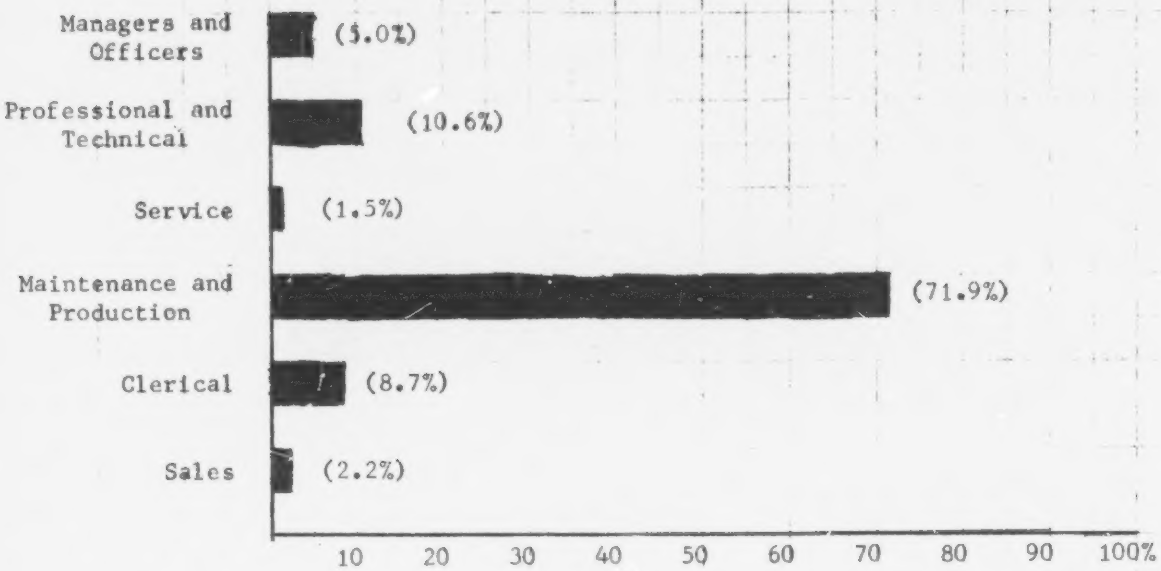
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	49.1	2.5
20 - 49 employees	21.2	4.5
50 - 99 employees	10.0	4.5
100 or more employees	19.7	88.5

The following table lists the ten specific occupations of the chemical industry in which the most workers were employed in June of 1980. These occupations had 42 percent of the group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Production Packagers	3,630	9.0
Spinners, Synthetic Filaments	2,230	5.5
Supervisors	2,090	5.2
Maintenance Mechanics	2,020	5.0
Managers and Officers	2,020	5.0
Chemical Operators, A	1,170	2.9
Inspectors	1,120	2.8
Draw Machine Operators	1,040	2.6
Sales Representatives	840	2.1
Creelers, Yarn	820	2.0

Employment by major occupational group is illustrated in the following graph.

PERCENT DISTRIBUTION OF CHEMICALS AND ALLIED PRODUCTS EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, JUNE, 1980



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CHEMICALS AND ALLIED PRODUCTS
(SIC 28)
June, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	40,220	N.A.	100.0
Managers and Officers	2,020	7.1	5.0
Professional and Technical Workers	4,280	N.A.	10.6
Engineers	1,020	N.A.	2.5
Chemical Engineers	480	11.2	1.2
Electrical and Electronic Engineers	60	9.3	0.1
Industrial Engineers	170	23.3	0.4
Mechanical Engineers	230	4.5	0.6
Safety Engineers	20	7.9	0.1
Other Engineers	60	N.A.	0.1
Chemists	680	9.3	1.7
Systems Analysts	100	9.9	0.2
Purchasing Agents and/or Buyers	120	8.0	0.3
Accountants and Auditors	240	11.9	0.6
Professional Nurses	40	12.1	0.1
Personnel and Labor Relations Specialists	130	6.0	0.3
Other Professional Workers	200	N.A.	0.5
Computer Programmers	60	4.7	0.1
Drafters	40	13.6	0.1
Electrical and Electronic Technicians	70	25.2	0.2
Industrial Engineering Technicians	20	23.2	0.1
Physical Science Technicians	290	16.0	0.7
Biological Science Technicians	610	26.4	1.5
Other Engineering Technicians	360	N.A.	0.9
Other Science Technicians	120	N.A.	0.3
Other Technicians	180	N.A.	0.5
Service Workers	610	N.A.	1.5
Supervisors	30	24.6	0.1
Janitors, Porters, and Cleaners	450	14.1	1.1
Guards and Doorkeepers	110	17.6	0.3
Other Service Workers	20	N.A.	0.1
Maintenance and Production Workers	28,920	N.A.	71.9
Supervisors	2,090	4.5	5.2
Mechanics and Repairers	2,150	N.A.	5.3
Automotive Mechanics	50	30.6	0.1
Maintenance Mechanics	2,020	8.4	5.0
Refrigeration and/or Air Conditioning Mechanics	30	25.0	0.1
Other Mechanics and Repairers	50	N.A.	0.1
Truck Drivers	330	13.1	0.8
Carpenters	50	16.7	0.1
Crane, Derrick, and Hoist Operators	20	16.3	0.1

CHEMICALS AND ALLIED PRODUCTS
(SIC 28)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Electricians	220	20.3	0.5
Industrial Truck Operators	700	9.6	1.7
Inspectors	1,120	14.7	2.8
Instrument Repairers	140	19.8	0.3
Loaders, Tank Cars and/or Trucks	50	23.4	0.1
Machinists	120	15.9	0.3
Maintenance Repairers, General Utility	340	14.6	0.8
Trades Helpers	100	15.4	0.2
Oilers	40	29.2	0.1
Maintenance Painters	30	7.5	0.1
Plumbers and/or Pipefitters	140	26.2	0.3
Production Packagers	3,630	9.6	9.0
Stationary Boiler Firers	60	26.2	0.1
Stationary Engineers	90	10.7	0.2
Welders and Flamecutters	40	26.0	0.1
Beam-Warper Tenders	450	29.1	1.1
Chemical Operators, A	1,170	7.8	2.9
Chemical Operators, B	490	16.3	1.2
Chemical Operator Helpers	190	23.5	0.5
Creelers, Yarn	820	15.9	2.0
Draw Machine Operators	1,040	19.3	2.6
Spinners, Synthetic Filaments	2,230	15.6	5.5
Sterilizers	140	5.8	0.3
Testers	650	12.8	1.6
Chief Operators	390	25.9	0.9
Waste Treatment Plant Operators	60	22.1	0.1
Weighers, Production	170	28.5	0.4
Cutters, Machine	160	26.9	0.4
Grinder Operators, Chemicals, Plastic, Rubber	540	24.7	1.3
Extruder Operators, Plastic	110	30.7	0.3
Filter and/or Filter Press Operators	80	33.7	0.2
Tinters	80	11.9	0.2
Mixers and/or Blenders, Chemical	940	15.5	2.3
Other Skilled Workers	210	N.A.	0.5
Other Semiskilled Workers	4,990	N.A.	12.4
Other Unskilled Workers	2,550	N.A.	6.3
Clerical Workers	3,500	N.A.	8.7
Supervisors	70	15.1	0.2
Office Machine Operators	270	N.A.	0.6
Computer Operators	80	5.2	0.2
Keypunch Operators	130	10.5	0.3
Other Office Machine Operators	60	N.A.	0.1
Stenographers	150	17.1	0.4
Accounting Clerks	330	11.0	0.8

CHEMICALS AND ALLIED PRODUCTS
(SIC 28)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Bookkeepers, Hand	40	20.3	0.1
File Clerks	30	12.1	0.1
General Office Clerks	260	15.5	0.6
Order Clerks	190	14.1	0.5
Payroll and/or Timekeeping Clerks	60	14.3	0.2
Personnel Clerks	90	5.2	0.2
Procurement Clerks	70	14.3	0.2
Secretaries	530	7.7	1.3
Statistical Clerks	60	27.8	0.2
Switchboard Operators/Receptionists	60	9.9	0.1
Typists	150	22.7	0.4
Production Clerks and/or Coordinators	190	16.1	0.5
Shipping Packers	360	21.7	0.9
Shipping and Receiving Clerks	230	11.9	0.6
Stock Clerks, Stockroom and Warehouse	180	11.5	0.4
Other Clerical Workers	180	N.A.	0.4
Sales Workers	890	N.A.	2.2
Sales Representatives	840	11.3	2.1
Other Sales Workers	50	N.A.	0.1

RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
(SIC 30)

Establishments engaged in the manufacture of rubber tires, rubber footwear, mechanical rubber goods, heels and soles, flooring, and rubber sundries are included in this major grouping. Tire manufacturing, but not recapping or retreading, is included in this category. These firms manufacture from natural, synthetic, or reclaimed rubber, gutta percha, balata, or gutta siak. This group also includes the molding of primary plastics and manufacturing miscellaneous finished plastic products.

The smallest size class has nearly 45 percent of the firms, but accounts for only 4 percent of the employment. The following table shows the percent distribution of establishments and employment by establishment size.

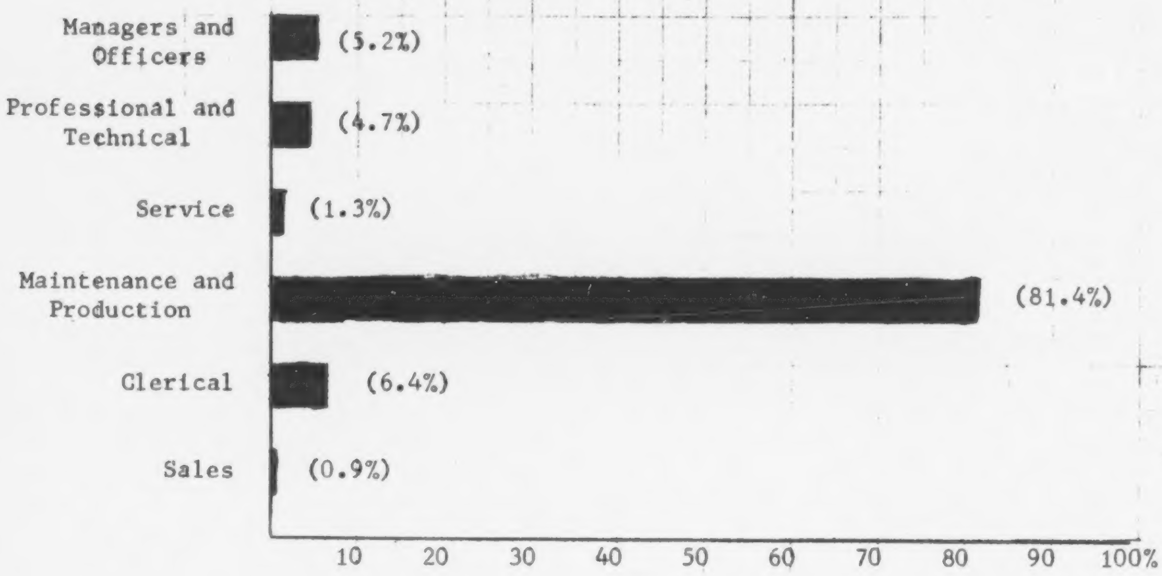
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	44.6	3.6
20 - 49 employees	21.5	7.0
50 - 99 employees	11.6	8.4
100 or more employees	22.3	81.0

As may be observed, the following table lists the ten specific occupations in the rubber and plastics products group in which the most workers were employed in June, 1980. These occupations accounted for 34.6 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Compression and/or Injection-Molding-Machine Operators, Plastics	1,450	6.2
Managers and Officers	1,230	5.2
Supervisors	1,060	4.5
Sewing Machine Operators, Regular Equipment-Nongarment	950	4.1
Assemblers	850	3.6
Inspectors	700	3.0
Industrial Truck Operators	600	2.6
Extruder Operators, Plastics or Rubber	600	2.6
Rubber-Mill Operators	320	1.4
Extruder Operator Helpers	320	1.4

The graph below illustrates employment by the major occupational groups.

PERCENT DISTRIBUTION OF RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, JUNE, 1980



RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
(SIC 30)
June, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	23,440	N.A.	100.0
Managers and Officers	1,230	6.6	5.2
Professional and Technical Workers	1,110	N.A.	4.7
Engineers	290	N.A.	1.2
Chemical Engineers	30	25.5	0.1
Electrical and Electronic Engineers	40	14.2	0.2
Industrial Engineers	80	8.7	0.4
Mechanical Engineers	80	8.8	0.3
Other Engineers	60	N.A.	0.3
Purchasing Agents and/or Buyers	60	7.3	0.3
Accountants and Auditors	110	14.5	0.5
Professional Nurses	20	5.9	0.1
Personnel and Labor Relations Specialists	60	5.5	0.3
Designers	20	28.0	0.1
Other Professional Workers	170	N.A.	0.7
Computer Programmers	20	17.3	0.1
Drafters	30	11.4	0.1
Industrial Engineering Technicians	20	31.9	0.1
Science Technicians	100	12.2	0.4
Other Engineering Technicians	190	N.A.	0.8
Other Technicians	20	N.A.	0.1
Service Workers	300	N.A.	1.3
Janitors, Porters, and Cleaners	240	12.5	1.0
Guards and Doorkeepers	60	15.8	0.3
Maintenance and Production Workers	19,100	N.A.	81.4
Supervisors	1,060	4.9	4.5
Mechanics and Repairers	340	N.A.	1.5
Maintenance Mechanics	280	11.3	1.2
Other Mechanics and Repairers	60	N.A.	0.3
Truck Drivers	190	22.0	0.8
Carpenters	30	14.7	0.1
Electricians	100	17.3	0.4
Industrial Truck Operators	600	5.7	2.6
Inspectors	700	19.3	3.0
Instrument Repairers	150	32.8	0.6
Machinists	230	33.0	0.9
Maintenance Repairers, General Utility	280	18.0	1.2
Trades Helpers	60	7.6	0.3
Millwrights	50	17.1	0.2
Oilers	30	14.7	0.1
Order Fillers	180	12.2	0.8

RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
(SIC 30)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Sewing Machine Operators, Regular Equipment - Nongarment	950	2.4	4.1
Stationary Boiler Firers	20	24.2	0.1
Tool and Die Makers	110	20.3	0.5
Welders and Flamecutters	30	20.0	0.1
Bias Machine Operators	120	9.9	0.5
Braiding Machine Tenders	50	25.8	0.2
Chemical Operator Helpers	110	27.2	0.5
Curers, Rubber Goods	80	6.7	0.3
Die Cutters	30	14.8	0.1
Finishers, Hand	230	22.9	0.9
Rubber-Mill Operators	320	4.5	1.4
Rubber Goods Cutters-Finishers	110	23.4	0.5
Splicers	50	12.7	0.2
Testers	50	18.3	0.2
Trimmers, Plastics	110	23.1	0.5
Press Tenders, Rubber Goods	260	6.9	1.1
Production Painters	120	25.4	0.5
Compression/Injection Molders	1,450	13.9	6.2
Conveyor Operators or Tenders	30	15.0	0.1
Setters, Plastic Molding Machine	100	21.3	0.4
Drier Operators, Chemicals, Plastic Resins Rubber	50	34.7	0.2
Weighers, Production	130	20.4	0.5
Cutters, Machine	60	16.8	0.2
Embossing, Stamping, and/or Marking Machine Operators	90	30.1	0.4
Grinder Operators, Chemicals, Plastics, Rubber	100	11.8	0.4
Calender Operators, Plastics or Rubber	140	17.2	0.6
Extruder Operators, Plastics or Rubber	600	23.8	2.6
Extruder Operator Helpers	320	33.7	1.4
Assemblers	850	19.6	3.6
Calender Operator Helpers	170	13.8	0.7
Other Skilled Workers	900	N.A.	3.8
Other Semiskilled Workers	4,620	N.A.	19.7
Other Unskilled Workers	2,740	N.A.	11.7
Clerical Workers	1,490	N.A.	6.4
Supervisors	40	9.4	0.2
Office Machine Operators	80	N.A.	0.3
Computer Operators	40	5.4	0.2
Keypunch Operators	40	4.8	0.2
Stenographers	40	17.2	0.2

RUBBER AND MISCELLANEOUS PLASTICS PRODUCTS
(SIC 30)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Accounting Clerks	80	9.7	0.3
General Office Clerks	90	19.1	0.4
Order Clerks	20	20.8	0.1
Payroll and/or Timekeeping Clerks	40	7.2	0.2
Personnel Clerks	30	6.3	0.1
Procurement Clerks	20	8.3	0.1
Secretaries	200	12.9	0.9
Statistical Clerks	20	14.9	0.1
Switchboard Operators/Receptionists	50	4.8	0.2
Typists	70	9.4	0.3
Production Clerks and/or Coordinators	160	5.4	0.7
Shipping Packers	180	17.7	0.8
Shipping and Receiving Clerks	160	11.1	0.7
Stock Clerks, Stockroom and Warehouse	140	14.7	0.6
Other Clerical Workers	70	N.A.	0.3
Sales Workers	210	N.A.	0.9
Sales Representatives	190	12.4	0.8
Sales Clerks	20	25.5	0.1

LEATHER AND LEATHER PRODUCTS, EXCEPT LUGGAGE AND HANDBAGS
(SIC 31, EXCEPT 316 AND 317)

Establishments in this major group are concerned primarily with tanning, currying, and finishing hides and skins. It also includes firms manufacturing finished leather, artificial leather, and similar products made of other materials.

The following table shows the percent distribution of establishments and employment by establishment size. The largest size class accounted for nearly 90 percent of the total employment for this group.

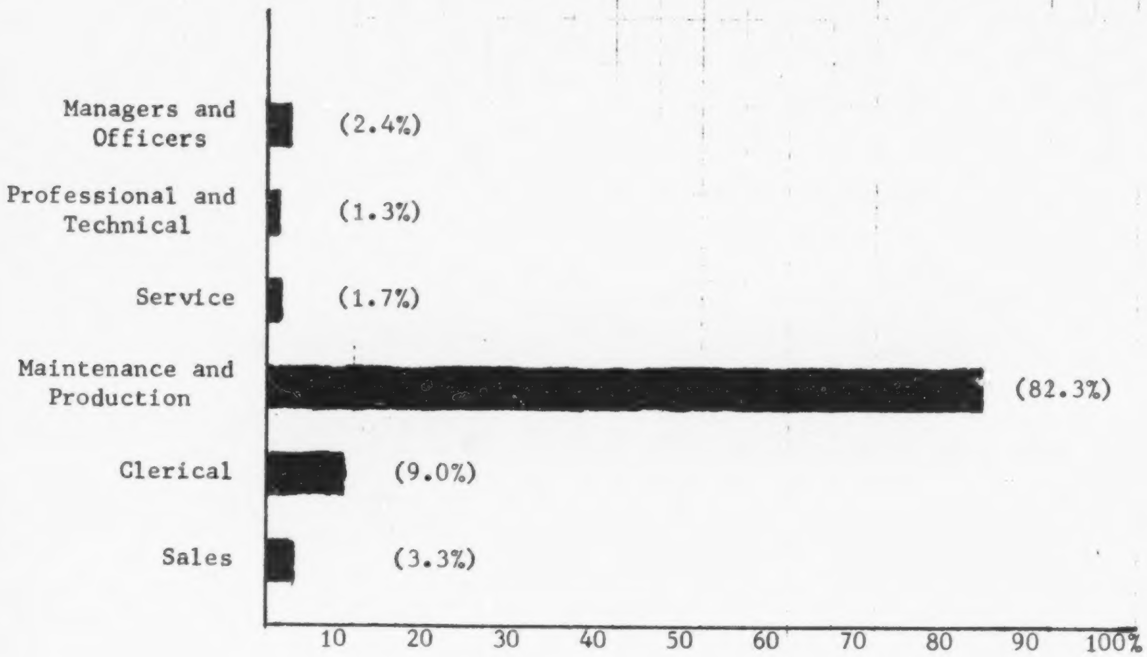
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	46.1	3.1
20 - 49 employees	15.4	4.8
50 - 99 employees	7.7	5.9
100 or more employees	30.8	86.2

The following table lists the five specific occupations in the leather group in which the most workers were employed in April, 1980. These occupations accounted for 31.5 percent of the group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Sewing Machine Operators, Special and/or Automatic Equipment - Nongarment	420	9.2
Sewing Machine Operators, Regular Equipment - Nongarment	390	8.6
Stitchers, Standard Machine	260	5.6
Die Cutters	220	4.9
Stitchers, Utility	150	3.2

The graph below illustrates employment by major occupational group.

PERCENT DISTRIBUTION OF LEATHER AND LEATHER PRODUCTS, EXCEPT LUGGAGE AND HANDBAGS EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, APRIL, 1980



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LEATHER AND LEATHER PRODUCTS, EXCEPT LUGGAGE AND HANDBAGS
(SIC 31, EXCEPT 316 AND 317)
April, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	4,550	N.A.	100.0
Managers and Officers	110	5.1	2.4
Professional and Technical Workers	60	N.A.	1.3
Service Workers	80	N.A.	1.7
Janitors, Porters, and Cleaners	40	2.3	0.9
Guards and Doorkeepers	20	0.0	0.4
Other Service Workers	20	N.A.	0.4
Maintenance and Production Workers	3,740	N.A.	82.3
Supervisors	140	1.6	3.0
Maintenance Mechanics	40	4.6	0.9
Inspectors	90	3.3	2.0
Production Packagers	60	1.8	1.2
Sewing Machine Operators, Regular Equipment - Nongarment	390	4.8	8.6
Sewing Machine Operators, Special and/or Automatic Equipment-Nongarment	420	0.7	9.2
Skivers	50	2.0	1.1
Machine Trimmers	20	5.9	0.5
Assemblers for Pull-Over	40	5.6	0.9
Bed Lasters	30	0.0	0.6
Bottom Fillers	30	0.0	0.6
Buffers, Shoe Parts	50	2.1	1.0
Cementers, Machine Joiner	50	1.8	1.2
Perforator Operators	20	0.0	0.4
Cobblers	20	0.0	0.5
Die Cutters	220	2.6	4.9
Flamers	20	5.6	0.4
Floor Workers, Footwear	40	4.3	0.9
Heel Attachers	20	0.0	0.4
Heel-Seat Lasters, Machine	20	5.6	0.4
Hand Lasters	20	6.2	0.4
Finish Repairers	60	2.2	1.4
Rough Rounders	30	0.0	0.6
Side Lasters	30	0.0	0.7
Leather Sorters	20	6.7	0.3
Sprayers, Hand or Machine	30	0.0	0.6
Stitchers, Special Machine	50	4.2	1.2
Stitchers, Standard Machine	260	6.6	5.6
Stitchers, Utility	150	6.6	3.2
Toe Lasters	40	3.6	0.9
Treers	40	4.3	0.9
Conveyor Operators/Tenders	20	0.0	0.4
Hand Cementers	130	2.2	2.9
Eyelet Machine Operators	70	4.9	1.6
Pulling and Lasting-Machine Operators	30	5.6	0.7

LEATHER AND LEATHER PRODUCTS, EXCEPT LUGGAGE AND HANDBAGS (SIC 31, EXCEPT 316 AND 317)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Hand Cutters	40	12.0	1.0
Hand Gluers/Cementers	40	5.4	0.9
Embossing, Stamping, and Marking Machine Operators	30	2.9	0.7
Assemblers	20	14.0	0.4
Other Skilled Workers	90	N.A.	2.0
Other Semiskilled Workers	430	N.A.	9.5
Other Unskilled Workers	340	N.A.	7.5
Clerical Workers	410	N.A.	9.0
Clerical Supervisors	20	26.8	0.5
Accounting Clerks	20	12.0	0.6
General Office Clerks	30	8.4	0.6
Payroll and/or Timekeeping Clerks	30	0.0	0.6
Secretaries	40	5.3	0.8
Production Clerks and/or Coordinators	50	4.3	1.1
Shipping Packers	50	2.6	1.2
Shipping and Receiving Clerks	40	0.8	0.8
Stock Clerks, Stockroom and Warehouse	40	6.2	0.8
Other Clerical Workers	90	N.A.	2.0
Sales Workers	150	N.A.	3.3
Sales Representatives	150	12.5	3.3

STONE, CLAY, GLASS, AND CONCRETE PRODUCTS EXCEPT HYDRAULIC CEMENT AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS

(SIC 32, EXCEPT 329)

Establishments in this group are primarily engaged in manufacturing glass, brick, structural clay tile, vitreous china plumbing fixtures, and concrete, gypsum, and plaster products. It also includes the manufacture of cut stone and stone products and asbestos.

The following table shows the percent distribution of establishments and employment by establishment size. Although 61 percent of the firms are in the smallest size class, over 63 percent of the employment is with firms of 100 or more employees.

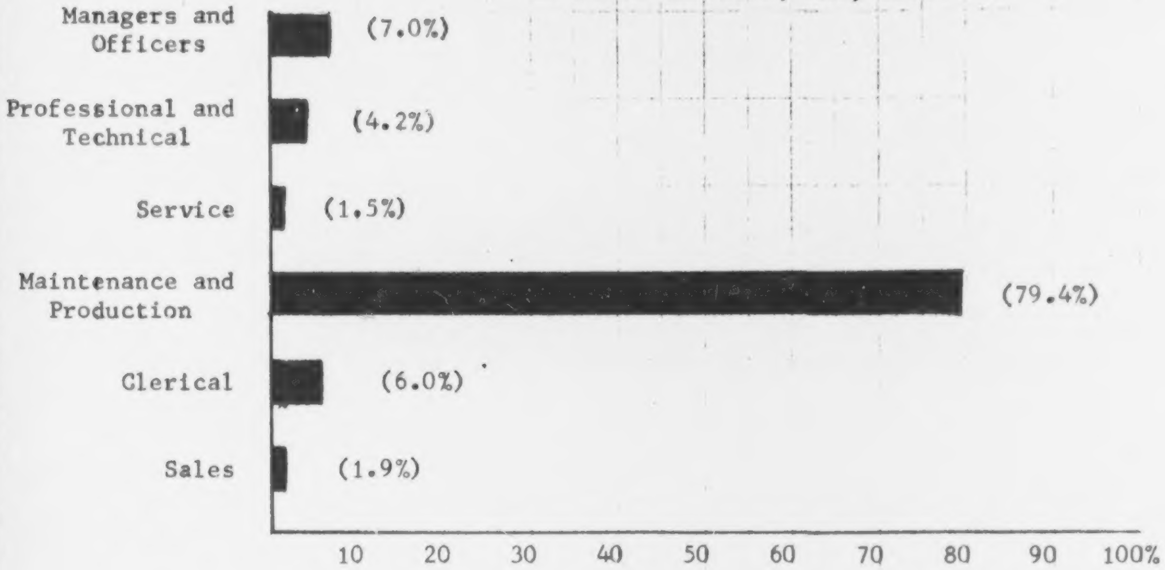
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employes	61.4	9.8
20 - 49 employees	24.1	16.8
50 - 99 employees	6.7	10.2
100 or more employees	7.8	63.2

The following table lists the ten specific occupations in this group in which the most workers were employed. These occupations accounted for 34.7 percent of the total employment for this group.

Occupation	Estimated Industry Employment	Percent Distribution
Truck Drivers	1,520	9.6
Managers and Officers	1,110	7.0
Supervisors	550	3.5
Industrial Truck Operators	530	3.3
Production Packagers	410	2.6
Maintenance Mechanics	320	2.0
Sales Representatives	300	1.9
Furnace, Kiln, and/or Drier Operators	280	1.8
Maintenance Repairers, General Utility	280	1.7
Automotive Mechanics	200	1.3

The graph below illustrates employment by major occupational category.

PERCENT DISTRIBUTION OF STONE, CLAY, GLASS, AND CONCRETE PRODUCTS EXCEPT HYDRAULIC CEMENT AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN IN NORTH CAROLINA, MAY, 1980



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STONE, CLAY, GLASS, AND CONCRETE PRODUCTS
EXCEPT HYDRAULIC CEMENT AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS
(SIC 32, EXCEPT 329)
May, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	15,920	N.A.	100.0
Managers and Officers	1,110	4.7	7.0
Professional and Technical Workers	670	N.A.	4.2
Electrical and Electronic Engineers	20	15.8	0.1
Industrial Engineers	40	8.5	0.2
Mechanical Engineers	70	11.5	0.5
Ceramic Engineers	30	16.9	0.2
Systems Analysts	20	31.2	0.2
Purchasing Agents and/or Buyers	30	11.0	0.2
Accountants and Auditors	40	7.7	0.3
Professional Nurses	30	10.9	0.2
Personnel and Labor Relations Specialists	30	5.1	0.2
Other Professional Workers	50	N.A.	0.3
Computer Programmers	30	10.2	0.2
Drafters	40	13.8	0.3
Electrical and Electronic Technicians	60	7.0	0.3
Other Technicians	180	N.A.	1.1
Service Workers	240	N.A.	1.5
Janitors, Porters, and Cleaners	180	9.3	1.1
Guards and Doorkeepers	40	13.0	0.3
Other Service Workers	20	N.A.	0.1
Maintenance and Production Workers	12,640	N.A.	79.4
Supervisors	550	5.5	3.5
Mechanics and Repairers	580	N.A.	3.6
Automotive Mechanics	200	6.2	1.3
Maintenance Mechanics	320	5.7	2.0
Other Mechanics and Repairers	60	N.A.	0.3
Truck Drivers	1,520	6.2	9.6
Concrete Rubbers	150	20.2	0.9
Crane, Derrick, and Hoist Operators	40	18.2	0.2
Delivery and Route Workers	180	21.5	1.1
Machine Drillers	40	29.0	0.3
Electricians	70	12.9	0.4
Heavy Equipment Operators	80	10.6	0.5
Riggers	50	30.8	0.3
Industrial Truck Operators	530	5.8	3.3
Inspectors	200	14.3	1.2
Maintenance Repairers, General Utility	280	17.5	1.7
Trades Helpers	30	34.1	0.2
Order Fillers	40	18.4	0.3
Pipe Strippers	70	24.5	0.5
Production Packagers	410	3.2	2.6

STONE, CLAY, GLASS, AND CONCRETE PRODUCTS
EXCEPT HYDRAULIC CEMENT AND MISCELLANEOUS NONMETALLIC MINERAL PRODUCTS
(SIC 32, EXCEPT 329)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Refraction Materials Repairers	20	18.7	0.1
Welders and Flamecutters	100	22.4	0.6
Blockmaking Machine Operators	190	14.1	1.2
Breakers	40	26.6	0.2
Brick and Tile Machine Operators	80	17.0	0.5
Cage Makers	80	17.0	0.5
Casters, Pottery and Porcelain	40	25.5	0.2
Concrete Pipe Makers	110	18.8	0.7
Concrete Stone Fabricators	120	22.5	0.7
Glass Cut Off Machine Operators	90	13.2	0.6
Stone Sandblasters	20	13.2	0.1
Stone Sawyers	50	4.1	0.3
Second Cutters, Hand	70	34.3	0.4
Setters and/or Drawers	200	24.4	1.2
Sorters	120	24.1	0.7
Conveyor Operators and/or Tenders	70	17.2	0.4
Mixers, Stone, Clay, and Glass	90	23.9	0.6
Mill and/or Grinder Operators, Minerals	60	14.9	0.4
Model and/or Mold Makers	30	28.9	0.2
Furnace, Kiln, and/or Drier Operators	280	11.7	1.8
Batch Plant Operators	180	8.2	1.1
Other Skilled Workers	180	N.A.	1.1
Other Semiskilled Workers	4,530	N.A.	28.5
Other Unskilled Workers	1,070	N.A.	6.7
Clerical Workers	960	N.A.	6.0
Clerical Supervisors	20	20.7	0.1
Stenographers	20	17.9	0.2
Accounting Clerks	80	10.9	0.4
Bookkeepers, Hand	140	6.4	0.9
General Office Clerks	120	9.5	0.7
Order Clerks	20	28.3	0.1
Payroll and/or Timekeeping Clerks	30	10.9	0.2
Secretaries	150	10.3	0.9
Switchboard Operators/Receptionists	20	14.1	0.1
Production Clerks and/or Coordinators	50	6.6	0.3
Shipping Packers	50	21.4	0.3
Shipping and Receiving Clerks	40	17.9	0.3
Stock Clerks, Stockroom and Warehouse	20	13.6	0.1
Vehicle Dispatchers	120	7.9	0.8
Other Clerical Workers	80	N.A.	0.5
Sales Workers	300	N.A.	1.9
Sales Representatives	300	7.3	1.9

PRIMARY METALS INDUSTRIES
(SIC 33)

This major group includes establishments primarily engaged in manufacturing pig iron, hot metal, and ferroalloys; iron and steel castings; and rolling, drawing and extruding copper, brass, and bronze. It also includes the manufacture of castings and die castings of aluminum, brass, bronze, etc., and the secondary smelting of nonferrous metals.

The following table shows the percent distribution of establishments and employment by establishment size. Nearly 71 percent of the establishments contain less than 50 employees

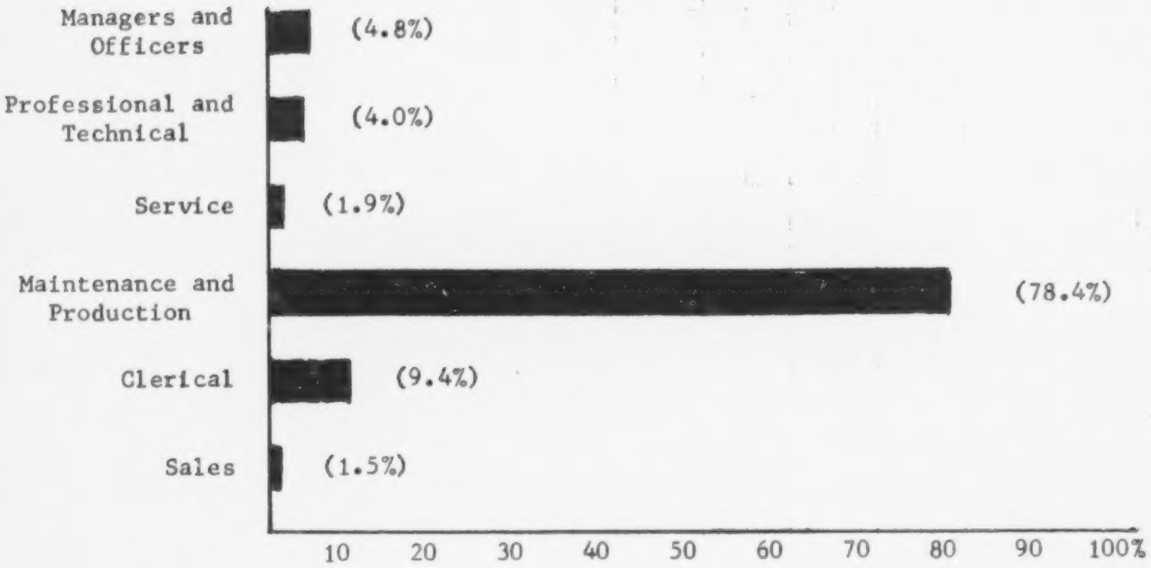
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	43.1	4.6
20 - 49 employees	27.4	12.9
50 - 99 employees	7.4	7.1
100 or more employees	22.1	75.3

The following table lists the five specific occupations in which the most workers were employed in April, 1980. These occupations accounted for 21.2 percent of the total employment of this group.

Occupation	Estimated Industry Employment	Percent Distribution
Supervisors	440	6.0
Managers and Officers	350	4.8
Assemblers	330	4.5
Maintenance Repairers, General Utility	250	3.4
Production Packagers	190	2.5

The graph below illustrates employment by major occupational category.

PERCENT DISTRIBUTION OF PRIMARY METALS INDUSTRIES EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, APRIL, 1980



PRIMARY METALS INDUSTRIES
(SIC 33)
April, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	7,350	N.A.	100.0
Managers and Officers	350	6.2	4.8
Professional and Technical Workers	300	N.A.	4.0
Engineers	120	N.A.	1.6
Electrical and Electronic Engineers	20	31.2	0.3
Industrial Engineers	20	6.7	0.3
Mechanical Engineers	40	16.5	0.6
Metallurgical Engineers	20	26.0	0.2
Other Engineers	20	N.A.	0.2
Purchasing Agents and/or Buyers	30	4.4	0.4
Accountants and Auditors	40	23.1	0.5
Personnel and Labor Relations Specialists	20	11.2	0.3
Other Professional Workers	30	N.A.	0.4
Drafters	20	17.6	0.2
Other Technical Workers	40	N.A.	0.6
Service Workers	140	N.A.	1.9
Janitors, Porters, and Cleaners	100	6.9	1.4
Other Service Workers	40	N.A.	0.5
Maintenance and Production Workers	5,760	N.A.	78.4
Supervisors	440	8.8	6.0
Maintenance Mechanics	140	22.4	1.9
Truck Drivers	140	12.8	1.9
Crane, Derrick, and Hoist Operators	90	25.0	1.2
Electricians	40	28.8	0.5
Filers, Grinders, and Buffers	150	12.0	2.0
Industrial Truck Operators	120	10.3	1.6
Inspectors	150	14.9	2.0
Machinists	60	13.1	0.8
Maintenance Repairers, General Utility	250	10.3	3.4
Trades Helpers	80	15.9	1.0
Metal Pourers	80	5.9	1.1
Production Packagers	190	25.0	2.5
Refractory Materials Repairers	30	10.9	0.4
Tool and Die Makers	70	23.7	0.9
Welders and Flamecutters	50	27.3	0.7
Coilers, Winders, and/or Spoolers	110	32.8	1.5
Drill Press Operators	50	12.1	0.7
Machine Coremakers	50	5.9	0.7
Insulating Extruder Machine Operators	100	34.5	1.4
Grinding Machine Operators	110	20.3	1.5
Heat Treaters, Annealers, and/or Temperers	60	16.9	0.8
Machine Tool Operators, Combination	120	5.9	1.6

PRIMARY METALS INDUSTRIES
(SIC 33)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Bench and/or Floor Molders	80	12.1	1.1
Machine Molders	110	10.4	1.5
Wood Patternmakers	20	15.8	0.3
Shakeout Workers	70	9.6	0.9
Stranding Machine Operators	50	34.3	0.7
Testers	70	26.4	1.0
Punch Press Operators	130	27.6	1.7
Furnace Operators and/or Cupola Tenders	80	19.6	1.1
Furnace Operators or Heater Helpers	30	26.9	0.4
Sand Cutters, Mixers, and/or Slingers	20	9.1	0.3
Assemblers	330	26.7	4.5
Other Skilled Workers	300	N.A.	4.1
Other Semiskilled Workers	1,100	N.A.	15.0
Other Unskilled Workers	680	N.A.	9.3
Clerical Workers	690	N.A.	9.4
Computer Operators	20	23.4	0.3
Accounting Clerks	40	19.0	0.5
Bookkeepers, Hand	20	8.7	0.3
General Office Clerks	80	17.9	1.0
Order Clerks	30	16.1	0.5
Payroll and/or Timekeeping Clerks	20	24.9	0.2
Secretaries	80	10.2	1.1
Switchboard Operators/Receptionists	20	12.5	0.2
Typists	20	25.8	0.2
Production Clerks and/or Coordinators	60	10.5	0.9
Shipping Packers	120	20.7	1.6
Shipping and Receiving Clerks	40	11.8	0.6
Stock Clerks, Stockroom and Warehouse	50	16.7	0.7
Other Clerical Workers	90	N.A.	1.2
Sales Workers	110	N.A.	1.5
Sales Representatives	110	19.8	1.5

FABRICATED METAL PRODUCTS,
EXCEPT MACHINERY AND TRANSPORTATION EQUIPMENT
(SIC 34)

This group of establishments includes those engaged primarily in fabricating products from ferrous and nonferrous metal such as cans, tinware, tools, cutlery, hardware, fabricated structural metal products, metal forgings, stampings, and a variety of metal and wire products not elsewhere classified.

The following table shows the percent distribution of establishments and employment by establishment size of this group. The majority of firms are in the smallest size class, but account for only 7.8 percent of the total employment.

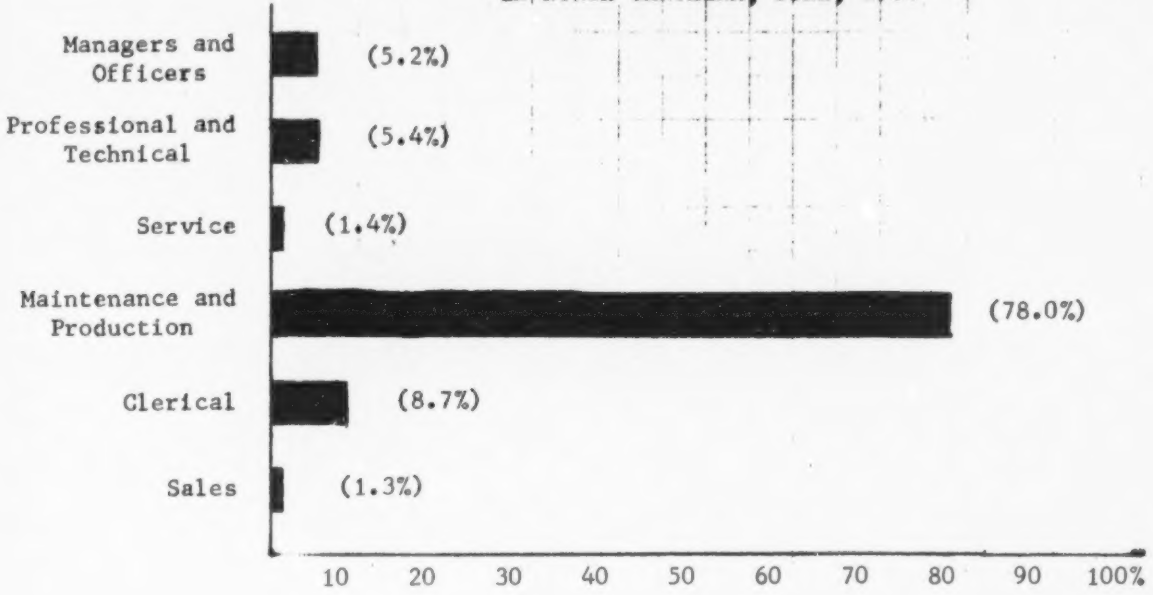
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	55.1	7.8
20 - 49 employees	21.4	11.8
50 - 99 employees	11.7	13.2
100 or more employees	11.9	67.3

The following table lists the ten specific occupations in this group in which the most workers were employed in June, 1980. These occupations had 37.7 percent of the group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Assemblers	2,270	8.5
Welders and Flamecutters	1,810	6.8
Managers and Officers	1,390	5.2
Supervisors	940	3.5
Punch Press Operators	800	3.0
Structural Metal Fitters	670	2.5
Machine Tool Operators, Combination	650	2.4
Inspectors	570	2.1
Trades Helpers	570	2.1
Production Painters	430	1.6

The graph below illustrates employment by major occupational category.

PERCENT DISTRIBUTION OF FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND TRANSPORTATION EQUIPMENT EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, JUNE, 1980



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FABRICATED METAL PRODUCTS,
EXCEPT MACHINERY AND TRANSPORTATION EQUIPMENT
(SIC 34)
June, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	26,750	N.A.	100.0
Managers and Officers	1,390	7.0	5.2
Professional and Technical Workers	1,440	N.A.	5.4
Engineers	300	N.A.	1.1
Electrical and Electronic Engineers	20	21.2	0.1
Industrial Engineers	110	15.5	0.4
Mechanical Engineers	130	8.7	0.5
Other Engineers	40	N.A.	0.2
Systems Analysts	50	25.0	0.2
Purchasing Agents and/or Buyers	120	6.2	0.4
Accountants and Auditors	150	9.8	0.6
Cost Estimators	90	9.8	0.3
Personnel and Labor Relations Specialists	50	6.7	0.2
Designers	20	16.8	0.1
Other Professional Workers	40	N.A.	0.2
Computer Programmers	50	15.9	0.2
Engineering Technicians	480	N.A.	1.8
Drafters	310	9.5	1.2
Tool Programmers, Numerical Control	30	12.4	0.1
Other Engineering Technicians	140	N.A.	0.5
Science Technicians	60	3.6	0.2
Other Technical Workers	30	N.A.	0.1
Service Workers	370	N.A.	1.4
Janitors, Porters, and Cleaners	240	6.0	0.9
Guards and Doorkeepers	60	34.3	0.2
Other Service Workers	70	N.A.	0.3
Maintenance and Production Workers	20,860	N.A.	78.0
Supervisors	940	5.0	3.5
Mechanics and Repairers	480	N.A.	1.8
Automotive Mechanics	40	18.0	0.1
Maintenance Mechanics	380	8.2	1.4
Other Mechanics and Repairers	60	N.A.	0.2
Truck Drivers	320	10.3	1.2
Crane, Derrick, and Hoist Operators	110	13.5	0.4
Electricians	270	6.2	1.0
Filers, Grinders, and Buffers	420	25.8	1.6
Industrial Truck Operators	290	13.9	1.1
Inspectors	570	6.3	2.1
Machinists	150	22.4	0.5
Maintenance Repairers, General Utility	150	19.8	0.6
Trades Helpers	570	15.9	2.1
Metal Fabricators	430	22.6	1.6

FABRICATED METAL PRODUCTS, EXCEPT MACHINERY AND TRANSPORTATION EQUIPMENT
(SIC 34)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Order Fillers	170	11.7	0.6
Maintenance Painters	20	27.8	0.1
Electroplaters	340	16.3	1.3
Plumbers and/or Pipefitters	110	7.8	0.4
Production Packagers	400	14.2	1.5
Roll Forming Machine Operators	30	18.9	0.1
Sandblasters and/or Shotblasters	40	10.2	0.2
Tool and Die Makers	280	9.9	1.0
Welders and Flamecutters	1,810	11.9	6.8
Drill Press Operators	250	18.1	0.9
Grinding Machine Operators	360	18.7	1.4
Heat Treaters	60	7.8	0.2
Lathe Machine Operators	260	14.8	1.0
Lay-Out Markers	250	23.9	0.9
Machine Tool Operators, Combination	650	13.1	2.4
Machine Tool Operators, Numerical Control	260	5.2	1.0
Machine Tool Operators, Tool Room	80	15.5	0.3
Machine Tool Setters	150	20.5	0.6
Milling/Planning Machine Operators	60	22.5	0.2
Plater Helpers	220	28.1	0.8
Metal Sawyers	80	22.0	0.3
Testers	60	12.8	0.2
Production Painters	430	11.1	1.6
Punch Press Operators	800	9.7	3.0
Punch Press Setters	60	14.2	0.2
Shear and/or Slitter Operators	240	16.1	0.9
Dip Platers	70	33.1	0.3
Structural Metal Fitters	670	17.8	2.5
Power Brake and/or Bending Machine Operators	370	12.4	1.4
Assemblers	2,270	16.1	8.5
Other Skilled Workers	1,140	N.A.	4.3
Other Semiskilled Workers	2,790	N.A.	10.4
Other Unskilled Workers	1,380	N.A.	5.2
Clerical Workers	2,330	N.A.	8.7
Clerical Supervisors	70	22.6	0.2
Office Machine Operators	200	N.A.	0.8
Computer Operators	80	8.6	0.3
Keypunch Operators	90	10.5	0.3
Other Office Machine Operators	30	N.A.	0.1
Stenographers	60	17.6	0.2
Accounting Clerks	150	12.0	0.6
Bookkeepers, Hand	160	17.3	0.6
File Clerks	30	21.0	0.1

FABRICATED METAL PRODUCTS,
EXCEPT MACHINERY AND TRANSPORTATION EQUIPMENT
(SIC 34)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
General Office Clerks	260	12.0	1.0
Order Clerks	70	15.7	0.2
Payroll and/or Timekeeping Clerks	100	12.2	0.4
Personnel Clerks	30	7.6	0.1
Procurement Clerks	30	17.4	0.1
Secretaries	300	6.1	1.1
Switchboard Operators	20	12.5	0.1
Switchboard Operators/Receptionists	60	8.5	0.2
Typists	100	12.0	0.4
Production Clerks and/or Coordinators	220	5.7	0.8
Shipping Packers	100	23.7	0.4
Shipping and Receiving Clerks	130	12.0	0.5
Stock Clerks, Stockroom and Warehouse	120	7.9	0.4
Other Clerical Workers	120	N.A.	0.4
Sales Workers	360	N.A.	1.3
Sales Representatives	360	13.6	1.3

MACHINERY, EXCEPT ELECTRICAL
(SIC 35, EXCEPT 356 AND 358)

Establishments in this major group are primarily engaged in manufacturing machinery and equipment. It includes machinery with built-in or detachable motors and portable tools, pneumatic or electrical powered. It does not include electrical household appliances or hand tools.

The following table shows the percent distribution of establishments and employment by establishment size. Over 75 percent of employment is with the larger size class although 83 percent of the firms has less than 50 employees.

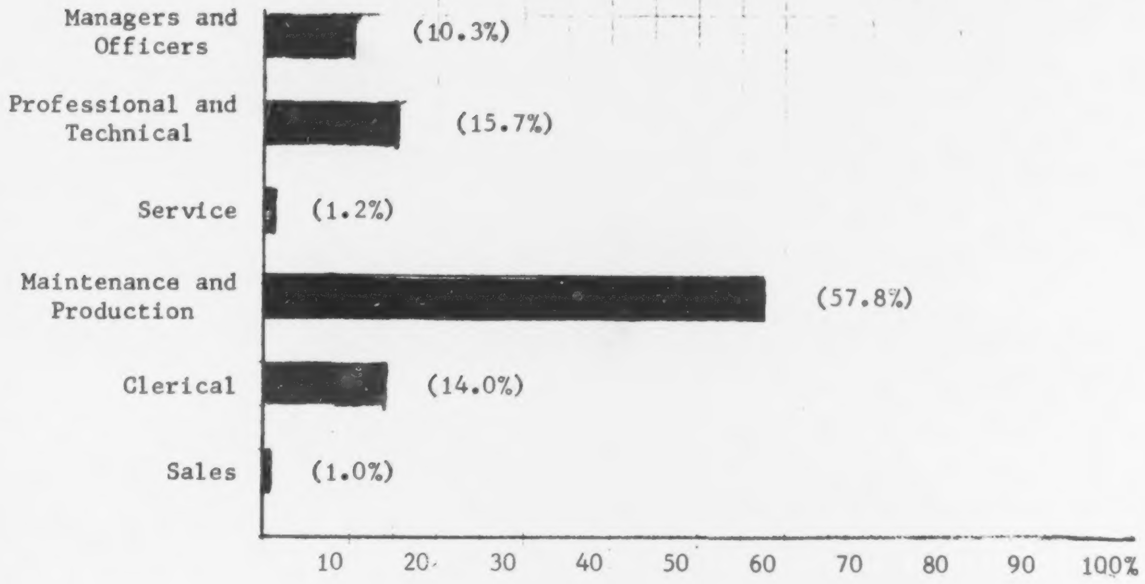
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	67.9	7.2
20 - 49 employees	15.7	8.0
50 - 99 employees	6.5	7.4
100 or more employees	9.9	77.4

The following table lists the ten specific occupations in the machinery group in which the most workers were employed in June, 1980. These occupations had 39.4 percent of the group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Managers and Officers	4,190	10.3
Machine Assemblers	2,810	6.9
Electro-Mechanical Equipment Assemblers	1,670	4.1
Welders and Flamecutters	1,350	3.3
Drill Press Operators	1,110	2.8
Supervisors	1,040	2.6
Machine Tool Operators, Combination	1,020	2.5
Lathe Machine Operators	990	2.4
General Office Clerks	940	2.3
Secretaries	880	2.2

The graph below illustrates employment by major occupational category.

PERCENT DISTRIBUTION OF MACHINERY, EXCEPT ELECTRICAL EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, JUNE, 1980



MACHINERY, EXCEPT ELECTRICAL
(SIC 35, EXCEPT 356 AND 358)
June, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	40,510	N.A.	100.0
Managers and Officers	4,190	2.7	10.3
Professional and Technical Workers	6,370	N.A.	15.7
Engineers	2,730	N.A.	6.7
Electrical and Electronic Engineers	1,540	2.1	3.8
Industrial Engineers	740	2.3	1.8
Mechanical Engineers	350	4.6	0.9
Other Engineers	100	N.A.	0.2
Systems Analysts, Business	150	10.2	0.4
Systems Analysts, Scientific and Technical	100	2.9	0.2
Purchasing Agents and/or Buyers	300	1.8	0.7
Accountants and Auditors	270	8.4	0.7
Commercial Artists	30	18.5	0.1
Cost Estimators	30	16.6	0.1
Writers and/or Editors	110	1.3	0.3
Professional Nurses	20	9.5	0.1
Personnel and Labor Relations Specialists	160	2.9	0.4
Designers	160	8.1	0.4
Other Professional Workers	80	N.A.	0.2
Computer Programmers, Business	580	5.2	1.4
Computer Programmers, Scientific and Technical	550	1.7	1.4
Engineering Technicians	1,040	N.A.	2.6
Drafters	380	7.6	1.0
Electrical and Electronic Technicians	250	28.4	0.6
Mechanical Engineering Technicians	40	16.0	0.1
Tool Programmers, Numerical Control	90	8.8	0.2
Industrial Engineering Technicians	60	4.6	0.2
Other Engineering Technicians	220	N.A.	0.5
Other Technical Workers	60	N.A.	0.2
Service Workers	460	N.A.	1.2
Janitors, Porters, and Cleaners	310	7.4	0.8
Guards and Doorkeepers	40	17.6	0.1
Other Service Workers	110	N.A.	0.3
Maintenance and Production Workers	23,400	N.A.	57.8
Supervisors	1,040	4.0	2.6
Mechanics and Repairers	590	N.A.	1.5
Maintenance Mechanics	370	13.4	0.9
Other Mechanics and Repairers	220	N.A.	0.5
Truck Drivers	100	5.4	0.2

MACHINERY, EXCEPT ELECTRICAL
(SIC 35, EXCEPT 356 AND 358)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Carpenters	20	4.5	0.1
Crane, Derrick, and Hoist Operators	120	24.8	0.3
Delivery and Route Workers	30	30.1	0.1
Electricians	150	6.8	0.4
Filers, Grinders, and Buffers	470	9.6	1.2
Gear Forming Machine Operators	100	18.6	0.2
Industrial Truck Operators	320	7.5	0.8
Inspectors	800	5.5	2.0
Machinists	720	13.1	1.8
Maintenance Repairers, General Utility	280	6.4	0.7
Trades Helpers	200	24.9	0.5
Millwrights	70	17.2	0.2
Order Fillers	260	9.4	0.6
Metal Pourers	20	23.8	0.1
Electroplaters	100	14.5	0.2
Production Packagers	140	18.3	0.3
Sandblasters and/or Shotblasters	60	10.4	0.1
Sheet Metal Workers	210	16.0	0.5
Tool and Die Makers	840	10.9	2.1
Welders and Flamecutters	1,350	8.3	3.3
Drill Press Operators	1,110	13.1	2.8
Grinding Machine Operators	630	12.5	1.6
Heat Treaters	100	16.5	0.2
Lathe Machine Operators	990	6.4	2.4
Lay-Out Markers	60	15.8	0.1
Machine Tool Operators, Combination	1,020	14.8	2.5
Machine Tool Operators, Numerical Control	760	8.1	1.9
Machine Tool Operators, Toolroom	140	13.8	0.4
Machine Tool Setters, Metal	380	9.9	0.9
Milling/Planning Machine Operators	610	8.4	1.5
Molders, Machine	30	31.8	0.1
Metal Sawyers	60	8.5	0.1
Testers	330	32.1	0.8
Production Painters	260	7.8	0.6
Punch Press Operators	260	12.5	0.6
Punch Press Setters	40	12.4	0.1
Shear and/or Slitter Operators	40	8.9	0.1
Furnace and/or Cupola Tenders	30	23.7	0.1
Power Brake and/or Bending Machine Operators	130	12.1	0.3
Machine Assemblers	2,810	12.2	6.9
Electro-Mechanical Equipment Assemblers	1,670	4.3	4.1
Electrical and Electronic Assemblers	290	34.7	0.7
Other Skilled Workers	520	N.A.	1.3
Other Semiskilled Workers	2,190	N.A.	5.4

MACHINERY, EXCEPT ELECTRICAL
(SIC 35, EXCEPT 356 AND 358)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Other Unskilled Workers	950	N.A.	2.4
Clerical Workers	5,660	N.A.	14.0
Clerical Supervisors	50	12.6	0.1
Office Machine Operators	440	N.A.	1.1
Computer Operators	250	3.1	0.6
Keypunch Operators	120	5.8	0.3
Other Office Machine Operators	70	N.A.	0.2
Accounting Clerks	190	4.8	0.5
Bookkeepers, Hand	30	10.5	0.1
File Clerks	40	27.4	0.1
General Office Clerks	940	6.2	2.3
Order Clerks	70	11.1	0.2
Payroll and/or Timekeeping Clerks	70	8.4	0.2
Personnel Clerks	40	8.9	0.1
Procurement Clerks	60	5.4	0.1
Secretaries	880	3.6	2.2
Statistical Clerks	40	22.9	0.1
Switchboard Operators/Receptionists	80	5.3	0.2
Typists	130	16.4	0.3
Production Clerks and/or Coordinators	850	3.7	2.1
Shipping Packers	260	10.8	0.6
Shipping and Receiving Clerks	160	8.1	0.4
Stock Clerks, Stockroom and Warehouse	810	4.0	2.0
Other Plant Clerical Workers	520	N.A.	1.3
Sales Workers	430	N.A.	1.0
Sales Representatives	430	7.4	1.0

ELECTRICAL AND ELECTRONIC MACHINERY, EQUIPMENT, AND SUPPLIES
(SIC 36, EXCEPT 361)

Establishments in this major group are primarily engaged in manufacturing machinery, apparatus, and supplies for the generation, storage, transmission, transformation, and utilization of electrical energy. This group includes the manufacture of household appliances.

The following table shows the percent distribution of establishments and employment by establishment size. The larger size class accounted for 95 percent of the total employment.

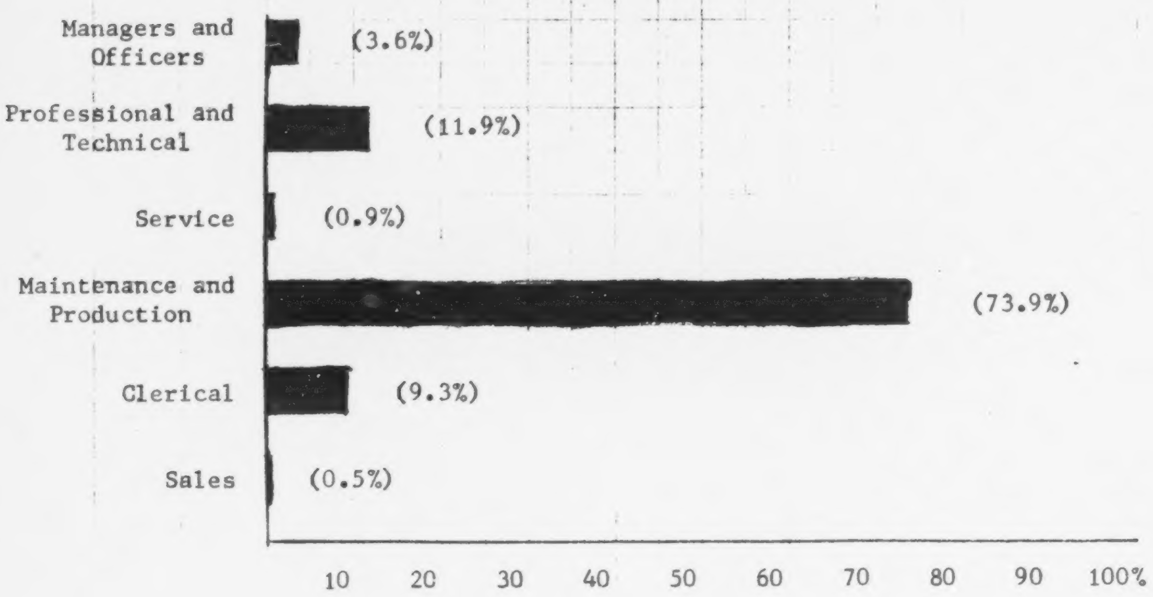
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	32.6	0.8
20 - 49 employees	15.7	2.0
50 - 99 employees	7.3	1.8
100 or more employees	44.4	95.4

The following table lists the ten specific occupations in this group in which the most workers were employed in June, 1980. These occupations accounted for 43.7 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Electrical and Electronic Assemblers	9,120	17.9
Inspectors	2,230	4.4
Managers and Officers	1,820	3.6
Wirers, Electronic	1,640	3.2
Testers	1,450	2.8
Electrical and Electronic Engineers	1,420	2.8
Supervisors	1,310	2.6
Electro-Mechanical Equipment Assemblers	1,180	2.3
Electrical and Electronic Technicians	1,080	2.1
Coil Winders	1,010	2.0

The graph below illustrates employment by major occupational category.

PERCENT DISTRIBUTION OF ELECTRICAL AND ELECTRONIC MACHINERY, EQUIPMENT, AND SUPPLIES EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, JUNE, 1980



ELECTRICAL AND ELECTRONIC MACHINERY, EQUIPMENT, AND SUPPLIES
(SIC 36, EXCEPT 361)
June, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	51,050	N.A.	100.0
Managers and Officers	1,820	N.A.	3.6
Professional and Technical Workers	6,000	N.A.	11.9
Engineers	2,580	N.A.	5.1
Chemical Engineers	30	16.2	0.1
Electrical and Electronic Engineers	1,420	14.3	2.8
Industrial Engineers	670	15.2	1.3
Mechanical Engineers	410	12.6	0.8
Other Engineers	50	N.A.	0.1
Systems Analysts, Business	140	9.2	0.3
Purchasing Agents and/or Buyers	180	5.9	0.3
Accountants and Auditors	310	8.3	0.6
Cost Estimators	40	31.9	0.1
Professional Nurses	50	6.9	0.1
Personnel and Labor Relations Specialists	140	5.7	0.3
Designers	90	31.9	0.2
Other Professional Workers	450	N.A.	0.9
Computer Programmers, Business	50	15.2	0.1
Drafters	240	8.9	0.5
Engineering Technicians	1,640	N.A.	3.2
Electrical and Electronic Technicians	1,080	24.7	2.1
Mechanical Engineering Technicians	210	5.1	0.4
Industrial Engineering Technicians	100	7.6	0.2
Other Engineering Technicians	250	N.A.	0.5
Science Technicians	50	4.8	0.1
Other Technicians	50	N.A.	0.1
Service Workers	460	N.A.	0.9
Janitors, Porters, and Cleaners	270	8.2	0.5
Guards and Doorkeepers	160	6.3	0.3
Other Service Workers	30	N.A.	0.1
Maintenance and Production Workers	37,740	N.A.	73.9
Supervisors	1,310	3.7	2.6
Mechanics and Repairers	1,130	N.A.	2.2
Electric-Motor Repairers	70	18.2	0.1
Electrical Instrument Repairers	80	15.9	0.2
Mechanics, Maintenance	940	9.7	1.8
Other Mechanics and Repairers	40	N.A.	0.1
Truck Drivers	60	8.1	0.1
Carpenters	30	14.3	0.1
Crane, Derrick, and Hoist Operators	30	10.5	0.1
Electricians	260	7.6	0.5

ELECTRICAL AND ELECTRONIC MACHINERY, EQUIPMENT, AND SUPPLIES
(SIC 36, EXCEPT 361)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Filers, Grinders, and Buffers	60	9.3	0.1
Gear Cutting, Grinders	120	0.0	0.2
Industrial Truck Operators	320	6.0	0.6
Inspectors	2,230	5.1	4.4
Instrument Repairers	140	26.9	0.3
Machinists	280	11.4	0.6
Maintenance Repairers, General Utility	390	5.2	0.8
Trades Helpers	150	10.4	0.3
Millwrights	110	23.1	0.2
Order Fillers	140	17.7	0.3
Electroplaters	150	22.3	0.3
Plumbers and/or Pipefitters	30	17.2	0.1
Production Packagers	590	6.7	1.1
Sheet Metal Workers	50	18.3	0.1
Tool and Die Makers	590	7.5	1.2
Welders and Flamecutters	240	6.3	0.5
Etchers and/or Engravers	30	0.0	0.1
Grinding Machine Operators, Metal	80	4.9	0.2
Lathe Machine Operators, Metal	120	16.3	0.2
Machine Tool Operators, Combination	590	6.4	1.2
Machine Tool Operators, Numerical Control	70	28.0	0.1
Machine Tool Operators, Toolroom	120	19.1	0.2
Machine Tool Setters, Metal	140	13.6	0.3
Milling/Planning Machine Operators	30	12.5	0.1
Plater Helpers	40	25.5	0.1
Testers	1,450	9.3	2.8
Production Painters	90	18.4	0.2
Die-Cast Machine Operators/Setters	80	18.5	0.2
Electronic Wirers	1,640	20.8	3.2
Electronic Impregnators	60	7.4	0.1
Riveters, Light	200	32.1	0.4
Punch-Press Operators, Metal	380	10.0	0.8
Punch-Press Setters, Metal	40	27.6	0.1
Shear/Slitter Operators, Metal	40	3.9	0.1
Coil Winders	1,010	9.5	2.0
Coil Tapers, Hand/Machine	40	0.0	0.1
Encapsulators	200	34.0	0.4
Compression/Injection Molders	490	20.8	1.0
Coil Finishers	190	20.2	0.4
Dip Platers, Non-Electric	30	19.4	0.1
Power Brake/Bend Machine Operators	40	17.6	0.1
Assemblers	17,440	N.A.	34.2
Machine Assemblers	700	7.1	1.4
Electro-Mechanical Equipment Assemblers	1,180	15.9	2.3

ELECTRICAL AND ELECTRONIC MACHINERY, EQUIPMENT, AND SUPPLIES
(SIC 36, EXCEPT 361)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Electric/Electronic Assemblers	9,120	9.1	17.9
Other Assemblers	6,440	N.A.	12.6
Mixers/Blenders, Chemical	60	11.8	0.1
Other Skilled Workers	880	N.A.	1.7
Other Semiskilled Workers	1,970	N.A.	3.9
Other Unskilled Workers	1,780	N.A.	3.5
Clerical Workers	4,750	N.A.	9.3
Clerical Supervisors	60	15.4	0.1
Computer Operators	140	7.2	0.3
Keypunch Operators	170	7.5	0.3
Stenographers	30	15.1	0.1
Accounting Clerks	220	8.9	0.4
Bookkeepers, Hand	40	13.4	0.1
File Clerks	40	9.6	0.1
General Office Clerks	300	7.8	0.6
Order Clerks	250	13.8	0.5
Payroll and/or Timekeeping Clerks	150	3.7	0.3
Personnel Clerks	120	3.5	0.2
Procurement Clerks	50	15.8	0.1
Secretaries	620	12.6	1.2
Statistical Clerks	40	5.4	0.1
Switchboard Operators/Receptionists	70	8.8	0.1
Typists	290	12.8	0.6
Production Clerks and/or Coordinators	530	11.3	1.0
Shipping Packers	300	6.3	0.6
Shipping and Receiving Clerks	190	9.7	0.4
Stock Clerks, Stockroom and Warehouse	760	4.0	1.5
Other Clerical Workers	380	N.A.	0.7
Sales Workers	280	N.A.	0.5
Sales Representatives	280	N.A.	0.5

TRANSPORTATION EQUIPMENT
(SIC 37)

This major group includes establishments primarily engaged in manufacturing equipment for transportation via land, water, and air. It includes the manufacturing of motor vehicles, aircraft, missiles, boats, railroad equipment, and other transportation equipment.

The following table shows the percent distribution of establishments and employment by establishment size. The largest size class accounted for 86 percent of the total employment,but for only 20 percent of the total establishments.

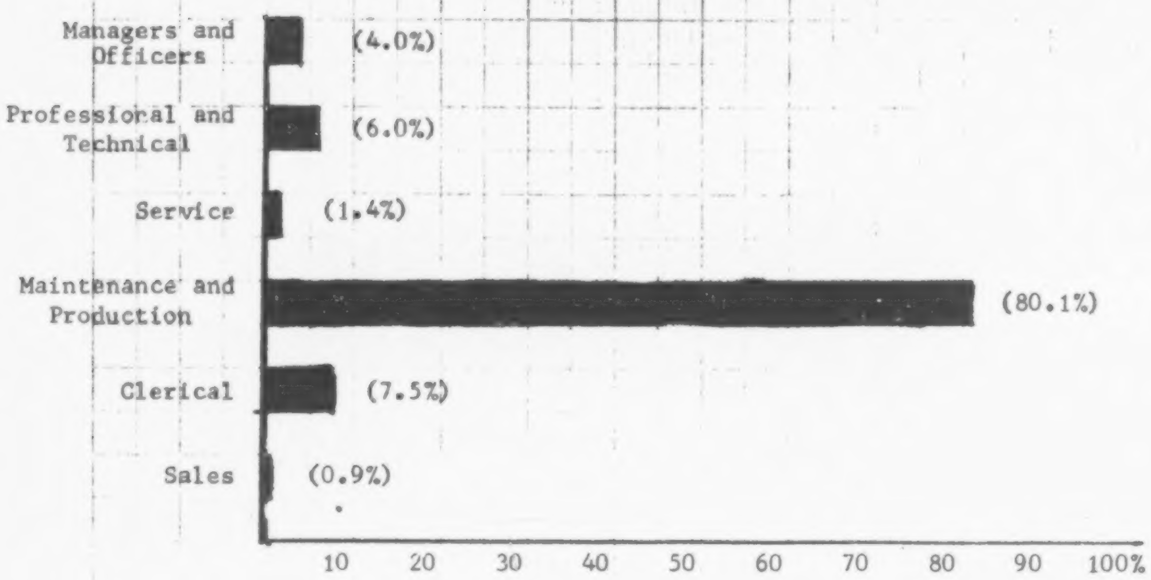
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	59.6	4.4
20 - 49 employees	15.2	5.8
50 - 99 employees	4.7	3.8
100 or more employees	20.5	86.0

The following table shows the ten specific occupations of the transportation equipment group in which the most workers were employed in June, 1980. These occupations accounted for 29.2 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Machine Assemblers	730	4.9
Supervisors	680	4.6
Welders and Flamecutters	650	4.4
Managers and Officers	600	4.0
Inspectors	380	2.6
Industrial Truck Operators	320	2.1
Laminators, Preforms	280	1.9
Carpenters	270	1.8
Machine Tool Setters, Metal	240	1.6
Trades Helpers	200	1.3

The graph below illustrates employment by major occupational category.

PERCENT DISTRIBUTION OF TRANSPORTATION EQUIPMENT EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, JUNE, 1980



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TRANSPORTATION EQUIPMENT
(SIC 37)
June, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	14,910	N.A.	100.0
Managers and Officers	600	N.A.	4.0
Professional and Technical Workers	900	N.A.	6.0
Engineers	360	N.A.	2.4
Industrial Engineers	170	14.7	1.1
Mechanical Engineers	150	13.4	1.0
Other Engineers	40	N.A.	0.3
Purchasing Agents and/or Buyers	110	9.4	0.8
Accountants and Auditors	60	13.3	0.4
Professional Nurses	16	24.2	0.1
Personnel and Labor Relations Specialists	50	9.1	0.3
Designers	20	14.4	0.2
Other Professional Workers	50	N.A.	0.3
Computer Programmers, Business	20	19.5	0.1
Drafters	90	15.3	0.6
Electrical and Electronic Technicians	30	35.0	0.2
Industrial Engineering Technicians	20	23.6	0.1
Other Engineering Technicians	60	N.A.	0.4
Other Technicians	15	N.A.	0.1
Service Workers	210	N.A.	1.4
Janitors, Porters, and Cleaners	130	19.0	0.9
Guards and Doorkeepers	80	31.8	0.6
Maintenance and Production Workers	11,940	N.A.	80.1
Supervisors	680	7.0	4.6
Mechanics and Repairers	310	N.A.	2.1
Marine Mechanics and/or Repairers	40	0.0	0.3
Maintenance Mechanics	190	24.4	1.3
Other Mechanics and Repairers	80	N.A.	0.5
Carpenters	270	10.7	1.8
Electricians	100	12.4	0.7
Filers, Grinders, Buffers	160	19.8	1.1
Industrial Truck Operators	320	17.9	2.1
Inspectors	380	18.9	2.6
Maintenance Repairers, General Utility	160	27.5	1.1
Trades Helpers	200	16.2	1.3
Plumbers and/or Pipefitters	20	33.3	0.1
Production Packagers	30	29.7	0.2
Sewing Machine Operators, Regular Equipment - Nongarment	40	31.1	0.3
Sheet Metal Workers	70	26.3	0.5
Shipriggers	20	24.0	0.1
Tool and Die Makers	70	33.2	0.5

TRANSPORTATION EQUIPMENT
(SIC 37)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Welders and Flamecutters	650	19.3	4.4
Machine Tool Operators, Toolroom	60	27.9	0.4
Machine Tool Setters, Metal	240	33.2	1.6
Patternmakers, Wood	20	0.0	0.1
Power-Screwdriver Operators	40	28.0	0.2
Shipwrights	20	0.0	0.1
Woodworking-Machine Operators	70	13.9	0.4
Production Painters	140	25.4	0.9
Assemblers	2,480	N.A.	16.6
Machine Assemblers	730	34.3	4.9
Electro-Mechanical Equipment Assemblers	20	20.0	0.1
Other Assemblers	1,730	28.0	11.6
Laminators, Preforms	280	6.9	1.9
Other Skilled Workers	380	N.A.	2.6
Other Semiskilled Workers	3,830	N.A.	25.7
Other Unskilled Workers	900	N.A.	6.1
Clerical Workers	1,120	N.A.	7.5
Clerical Supervisors	20	13.3	0.1
Office Machine Operators	90	N.A.	0.6
Bookkeeping and Billing Machine Operators	20	23.5	0.1
Computer Operators	20	15.6	0.2
Keypunch Operators	50	11.9	0.3
Accounting Clerks	70	11.3	0.5
General Office Clerks	170	21.0	1.1
Order Clerks	30	30.5	0.2
Payroll and/or Timekeeping Clerks	30	10.8	0.2
Personnel Clerks	30	13.3	0.2
Procurement Clerks	20	33.3	0.1
Secretaries	130	7.8	0.9
Statistical Clerks	20	31.3	0.1
Switchboard Operators/Receptionists	30	5.1	0.2
Typists	30	16.6	0.2
Production Clerks and/or Coordinators	120	17.2	0.8
Stock Clerks, Stockroom and Warehouse	100	9.6	0.7
Other Clerical Workers	230	N.A.	1.5
Sales Workers	140	N.A.	0.9
Sales Representatives	140	19.0	0.9

MEASURING, ANALYZING, AND CONTROLLING INSTRUMENTS; PHOTOGRAPHIC, MEDICAL, AND OPTICAL GOODS
(SIC 38, EXCEPT 387)

Establishments in this major group are primarily engaged in manufacturing instruments for measuring, testing, analyzing, and controlling, and associated accessories; optical instruments and lenses; surveying and drafting instruments; surgical, medical, and dental instruments, equipment, and supplies; opthalmic goods; photographic equipment; and watches and clocks.

The following table shows the percent distribution of establishments and employment by establishment size. The smaller size classes accounted for almost 84 percent of the total establishments, but the larger class accounted for almost 90 percent of the total employment.

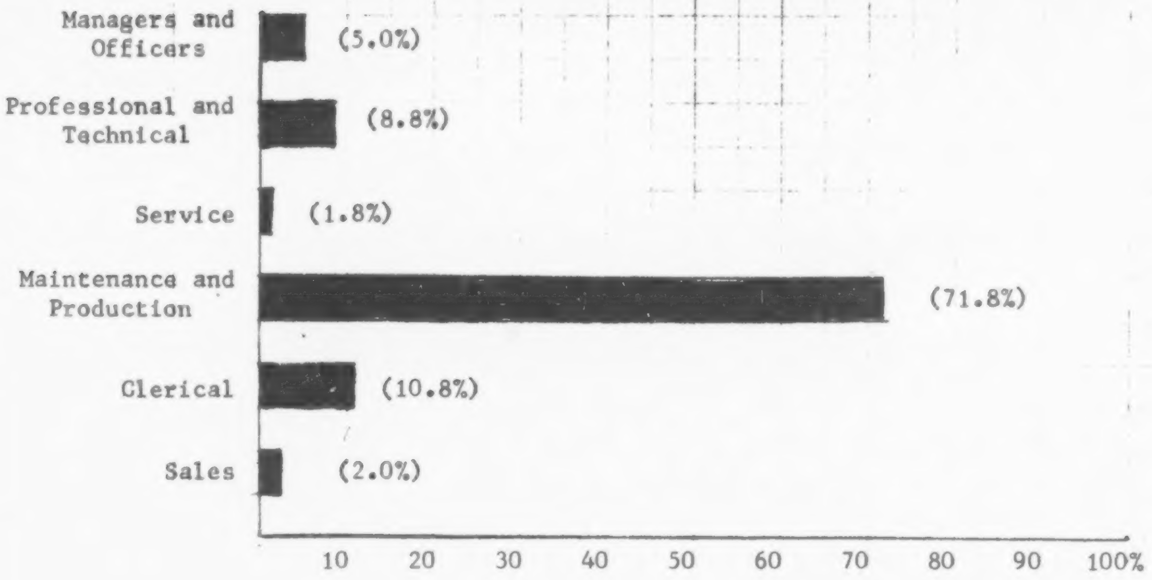
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	67.0	3.8
20 - 49 employees	10.6	2.9
50 - 99 employees	5.9	3.7
100 or more employees	16.5	89.6

The following table lists the ten specific occupations in this major group in which the most workers were employed in April, 1980. These occupations accounted for 41.5 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Instrument Makers/Assemblers	670	7.9
Sewing Machine Operators, Regular Equipment - Nongarment	540	6.3
Managers and Officers	430	5.0
Supervisors	390	4.6
Chemical Operator Helpers	390	4.6
Chemical Operators B	310	3.6
Inspectors	300	3.5
Production Packagers	200	2.3
Sales Representatives	170	2.0
Chemical Operators A	140	1.7

The graph below illustrates employment by major occupational category.

PERCENT DISTRIBUTION OF MEASURING, ANALYZING, AND CONTROLLING INSTRUMENTS;
PHOTOGRAPHIC, MEDICAL, AND OPTICAL GOODS EMPLOYMENT BY
MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, APRIL, 1980



MEASURING, ANALYZING, AND CONTROLLING INSTRUMENTS;
PHOTOGRAPHIC, MEDICAL, AND OPTICAL GOODS
(SIC 38, EXCEPT 387)
April, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	8,540	N.A.	100.0
Managers and Officers	430	9.9	5.0
Professional and Technical Workers	750	N.A.	8.8
Engineers	280	N.A.	3.3
Chemical Engineers	80	4.7	0.9
Electrical and Electronic Engineers	50	11.0	0.6
Industrial Engineers	50	18.3	0.6
Mechanical Engineers	80	13.5	0.9
Other Engineers	20	N.A.	0.2
Chemists	80	31.9	1.0
Other Natural and Mathematical Scientists	70	N.A.	0.8
Systems Analysts	20	24.8	0.2
Purchasing Agents and/or Buyers	40	17.1	0.4
Accountants and Auditors	30	8.7	0.3
Personnel and Labor Relations Specialists	30	0.0	0.3
Other Professional Workers	50	N.A.	0.6
Computer Programmers	20	26.1	0.3
Drafters	20	7.9	0.2
Electrical and Electronic Technicians	30	9.8	0.3
Other Engineering Technicians	40	N.A.	0.5
Other Technicians	40	N.A.	0.5
Service Workers	150	N.A.	1.8
Janitors, Porters, and Cleaners	100	4.3	1.1
Guards and Doorkeepers	30	16.4	0.4
Other Service Workers	20	N.A.	0.2
Maintenance and Production Workers	6,120	N.A.	71.8
Supervisors	390	5.9	4.6
Maintenance Mechanics	120	4.0	1.4
Truck Drivers	20	8.7	0.2
Electricians	20	30.9	0.2
Gear Cutting, Grinders	20	10.2	0.2
Inspectors	300	5.9	3.5
Instrument Repairers	80	8.7	0.9
Maintenance Repairers, General Utility	50	10.1	0.6
Order Fillers	60	34.3	0.7
Production Packagers	200	5.6	2.3
Sewing Machine Operators, Regular Equipment - Nongarment	540	6.6	6.3
Sewing Machine Operators, Special Equipment - Nongarment	20	0.0	0.2

MEASURING, ANALYZING, AND CONTROLLING INSTRUMENTS; PHOTOGRAPHIC, MEDICAL, AND OPTICAL GOODS
(SIC 38, EXCEPT 387)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Stationary Boiler Firers	20	4.3	0.3
Tool and Die Makers	100	6.9	1.2
Welders and Flamecutters	30	23.9	0.3
Opticians, Dispensing	20	0.0	0.2
Chemical Operators A	140	4.7	1.7
Chemical Operators B	310	4.7	3.6
Chemical Operator Helpers	390	4.7	4.6
Grinding Machine Operators, Metal	120	15.5	1.4
Lathe Machine Operators, Metal	50	14.0	0.6
Machine Tool Operators, Numerical-Control	20	13.2	0.2
Milling/Planning Machine Operators	30	22.8	0.4
Testers	70	7.4	0.8
Production Painters	40	20.6	0.4
Electronic Wirers	50	10.2	0.6
Punch-Press Operators, Metal	90	18.5	1.0
Compression/Injection Molders	90	21.4	1.0
Assemblers	1,340	N.A.	15.7
Instrument Makers/Assemblers	670	8.9	7.9
Electro-Mechanical Equipment Assemblers	100	13.5	1.2
Electrical/Electronic Assemblers	120	31.4	1.4
Other Assemblers	450	N.A.	5.2
Other Skilled Workers	180	N.A.	2.1
Other Semiskilled Workers	740	N.A.	8.7
Other Unskilled Workers	470	N.A.	5.6
Clerical Workers	920	N.A.	10.8
Clerical Supervisors	30	31.0	0.3
Computer Operators	20	22.8	0.2
Keypunch Operators	30	0.0	0.4
Stenographers	30	0.0	0.4
Accounting Clerks	40	15.6	0.5
General Office Clerks	70	13.3	0.8
Procurement Clerks	20	19.4	0.3
Secretaries	90	16.3	1.1
Switchboard Operators/Receptionists	20	9.1	0.2
Typists	20	20.0	0.2
Production Clerks and/or Coordinators	100	5.5	1.1
Shipping Packers	100	11.0	1.1
Shipping and Receiving Clerks	50	17.7	0.6
Stock Clerks, Stockroom and Warehouse	120	8.8	1.4
Other Clerical Workers	180	N.A.	2.1
Sales Workers	170	N.A.	2.0
Sales Representatives	170	16.6	2.0

MISCELLANEOUS MANUFACTURING INDUSTRIES
(SIC 39)

This major group includes establishments primarily engaged in manufacturing items not classified in any other major group. Included in this are jewelry, silverware, musical instruments, toys, sporting goods, pens, pencils, novelties, brooms, caskets, and other miscellaneous goods.

The following table shows the percent distribution of establishments and employment by establishment size. The smaller size classes accounted for over 90 percent of the total establishments but for only 33 percent of the total employment.

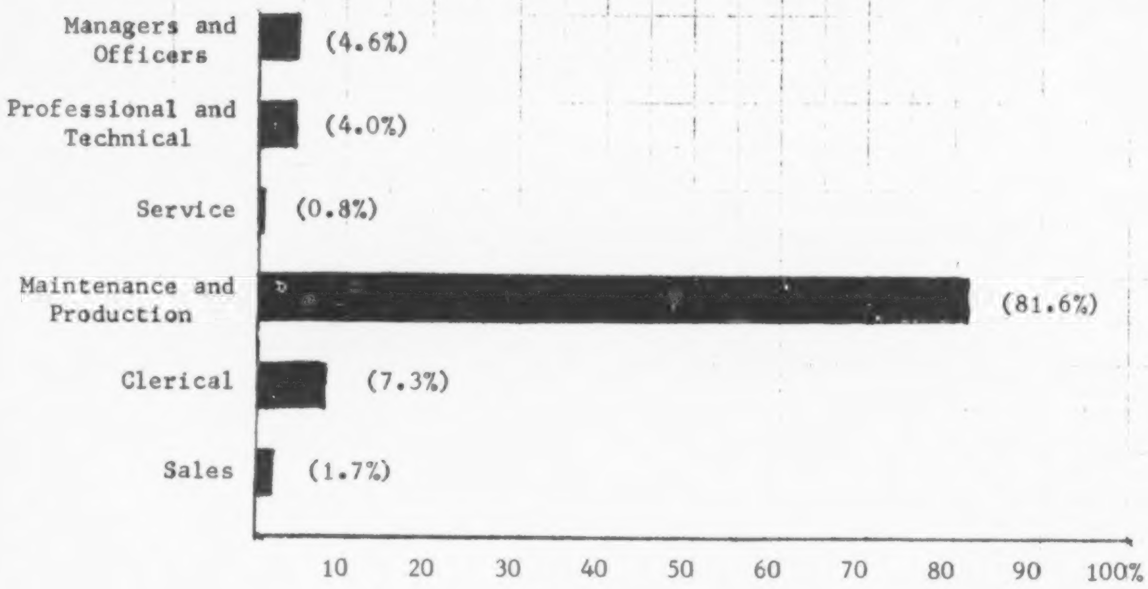
Establishment Size	Percent of Establishments	Percent of Employment
19 or fewer employees	72.2	10.8
20 - 49 employees	12.4	9.0
50 - 99 employees	7.1	13.0
100 or more employees	8.3	67.0

The following table lists the five specific occupations of this group in which the most workers were employed in May, 1980. These occupations accounted for 32.3 percent of the group's employment.

Occupation	Estimated Industry Employment	Percent Distribution
Assemblers	1,080	16.0
Managers and Officers	310	4.6
Supervisors	210	3.1
Production Packagers	210	3.1
Compression/Injection Molders	140	2.0

The graph below illustrates employment by major occupational category.

PERCENT DISTRIBUTION OF MISCELLANEOUS MANUFACTURING INDUSTRIES EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, MAY, 1980



MISCELLANEOUS MANUFACTURING INDUSTRIES
(SIC 39)
May, 1980

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	6,750	N.A.	100.0
Managers and Officers	310	5.0	4.6
Professional and Technical Workers	270	N.A.	4.0
Industrial Engineers	20	28.3	0.2
Purchasing Agent and/or Buyers	30	8.4	0.4
Accountants and Auditors	30	9.1	0.4
Designers	50	13.9	0.7
Other Professional Workers	30	N.A.	0.4
Drafters	20	23.6	0.4
Electrical and Electronic Technicians	20	24.9	0.2
Other Technicians	70	N.A.	1.0
Service Workers	60	N.A.	0.8
Janitors, Porters, and Cleaners	60	N.A.	0.8
Maintenance and Production Workers	5,510	N.A.	81.6
Supervisors	210	10.8	3.1
Maintenance Mechanics	20	32.3	0.4
Other Mechanics and Repairers	30	36.3	0.4
Truck Drivers	60	10.4	0.9
Cabinetmakers	60	2.4	0.9
Compositors and/or Typesetters	20	28.2	0.3
Electricians	20	11.8	0.3
Industrial Truck Operators	50	7.6	0.8
Inspectors	70	5.1	1.1
Jewelers and/or Silversmiths	20	13.5	0.3
Maintenance Repairers, General Utility	70	32.1	1.0
Trades Helpers	50	27.1	0.8
Order Fillers	30	0.0	0.4
Maintenance Painters	20	6.3	0.2
Production Packagers	210	7.3	3.1
Sewing Machine Operators, Regular Equipment - Nongarment	90	21.7	1.4
Sheet Metal Workers	50	25.5	0.7
Tool and Die Makers	40	3.5	0.6
Welders and Flamecutters	20	30.1	0.3
Cut-Off-Saw Operators, Lumber	20	17.7	0.2
Ripsaw Operators	20	8.8	0.2
Production Painters	80	13.3	1.2
Compression/Injection Molders	140	3.2	2.0
Gluers/Cementers, Hand	60	5.8	0.9
Screen or Stencil Printers	60	32.2	0.9
Assemblers	1,080	22.9	16.0
Decorators, Hand	30	27.5	0.4

MISCELLANEOUS MANUFACTURING INDUSTRIES
(SIC 39)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Blow-Molding Machine Operators	120	0.0	1.8
Other Skilled Workers	150	N.A.	2.2
Other Semiskilled Workers	1,830	N.A.	27.4
Other Unskilled Workers	780	N.A.	11.6
Clerical Workers	490	N.A.	7.3
Office Machine Operators	30	N.A.	0.4
Accounting Clerks	20	13.8	0.4
Bookkeepers, Hand	20	12.9	0.3
General Office Clerks	40	10.9	0.6
Order Clerks	40	23.7	0.5
Payroll and/or Timekeeping Clerks	20	10.5	0.3
Secretaries	70	9.3	1.0
Switchboard Operators/Receptionists	20	13.2	0.3
Other Office Clerical Workers	70	N.A.	1.0
Production Clerks and/or Coordinators	30	16.2	0.5
Shipping Packers	70	19.6	1.0
Shipping and Receiving Clerks	30	18.4	0.5
Stock Clerks, Stockroom and Warehouse	30	16.0	0.4
Sales Workers	110	N.A.	1.7
Sales Representatives	110	14.9	1.7

HOSPITALS
(SIC 806)

Establishments in this major group are primarily engaged in providing diagnostic services, extensive medical treatment including surgical services, and other hospital services, as well as continuous nursing services.

The following table shows the percent distribution of establishments and employment by establishment size. Nearly 97 percent of the total employment is in establishments with 100 or more employees.

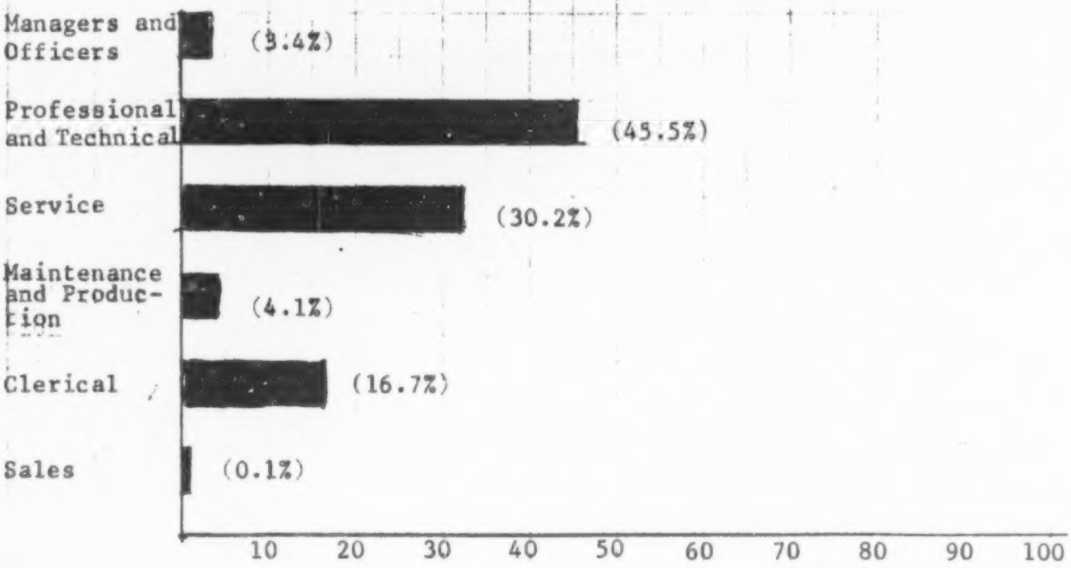
Establishment	Percent of Establishments	Percent of Employment
19 or more employees	6.5	0.1
20-49 employees	6.5	0.7
50-99 employees	12.1	2.4
100 or more employees	74.9	96.8

The following table lists the ten specific occupations in this group in which the most workers were employed in June 1980. These occupations accounted for 58.3 percent of the total employment.

Occupation	Estimated Industry Employment	Percent Distribution
Professional Nurses	14,400	17.7
Nurse Aides and/or Orderlies	10,370	12.8
Licensed Practical Nurses	7,180	8.8
Maids	2,830	3.5
Managers and Officers	2,790	3.4
Psychiatric Aids	2,760	3.4
General Office Clerks	1,940	2.4
Kitchen Helpers	1,850	2.3
Secretaries	1,760	2.2
Physicians and/or Surgeons	1,430	1.8

The graph below illustrates employment by major occupational category.

PERCENT DISTRIBUTION OF HOSPITAL EMPLOYMENT BY MAJOR OCCUPATIONAL CATEGORY IN NORTH CAROLINA, APRIL, 1980



HOSPITALS
(SIC 806)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Total Employment	81,260	N.A.	100.0
Managers and Officers	2,790	N.A.	3.4
Professional and Technical Workers	36,980	N.A.	45.5
Psychologists	270	8.4	0.3
Other Social Scientists	230	N.A.	0.3
Systems Analysts	110	14.5	0.1
Purchasing Agents and/or Buyers	150	3.7	0.2
Accountants and Auditors	200	5.7	0.2
Caseworkers	930	6.7	1.1
Clergy	120	20.2	0.1
Dentists	50	24.3	0.1
Dietitions and/or Nutritionists	220	3.4	0.3
Librarians, Professional	140	22.5	0.2
Professional Nurses	14,400	2.5	17.7
Occupational Therapists	250	12.8	0.3
Personnel and Labor Relations Specs.	190	6.0	0.2
Pharmacists	480	3.5	0.6
Physical Therapists	360	4.0	0.4
Physicians and/or Surgeons	1,430	20.2	1.8
Other Therapists	200	N.A.	0.2
Manual-Arts, Therapists	290	13.4	0.4
Speech Pathologists	100	11.9	0.1
Respiratory Therapists	700	8.8	0.9
Other Professional Workers	490	N.A.	0.6
Computer Programmers	70	12.6	0.1
Other Engineering Technicians	50	N.A.	0.1
Licensed Practical Nurses	7,180	4.4	8.8
Physician's Assistants	510	42.8	0.6
Surgical Technicians	780	5.5	1.0
Radiologic Technicians	930	6.5	1.1
Pharmacy Helpers	630	4.4	0.8
Medical-Record Librarians	280	6.5	0.3
Medical Laboratory Technicians	1,080	5.7	1.3
Biochemistry Technologists	160	14.1	0.2
Microbiology Technologists	130	15.6	0.2
Cytotechnologists	80	7.6	0.1
Histologic Technologists	110	7.0	0.1
Medical Lab Technicians	850	14.6	1.0
Electrocardiograph Technicians	270	4.3	0.3
Electroencephalograph Technicians	90	7.6	0.1
Dietetic Technicians	90	9.7	0.1
Blood Bank Technician Specialists	350	11.6	0.4
Physical Therapy Assistants	390	6.0	0.5
Radiologic and/or Nuclear Technicians	780	5.6	1.0
Other Medical and Dental Technicians	540	13.3	0.7
Other Technicians	320	18.6	0.4

HOSPITALS
(SIC 806)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Service Workers	24,500	N.A.	30.2
Supervisors, Nonworking Service	460	11.9	0.6
Maids	2,830	4.6	3.5
Janitors, Porters and Cleaners	1,210	9.5	1.5
Guards and Doorkeepers	410	7.6	0.5
Bakers, Bread and/or Pastry	110	9.9	0.1
Dining Room Attendants	350	19.1	0.4
Kitchen Helpers	1,850	6.5	2.3
Waiters or Waitresses	110	15.8	0.1
Counter Attendants	270	7.0	0.3
Cooks, Short Order	50	20.3	0.6
Pantry, Sandwich and/or Coffee Makers	90	12.3	0.1
Cooks, Institution	740	4.3	0.9
Other Food Service Workers	1,460	N.A.	1.8
Housekeepers	550	11.1	0.7
Nurse Aides and/or Orderlies	10,370	4.5	12.8
Psychiatric Aids	2,760	26.7	3.4
Child-Care Workers	170	12.8	0.2
Social Service Aides	80	9.2	0.9
Medical Assistants	70	25.1	0.9
Occupational Therapy Assistants	60	15.9	0.7
Other Service Workers	500	N.A.	0.6
Maintenance and Production Workers	3,360	N.A.	4.1
Supervisors	80	13.9	0.9
Mechanics and Repairers	290	N.A.	0.4
Electromedical Equipment Operators	70	7.9	0.8
Maintenance Mechanics	180	11.5	0.2
Other Mechanics and Repairers	40	N.A.	0.1
Washers, Machine and/or Starchers	180	14.1	0.2
Laundry Pressers, Machine	440	12.1	0.5
Truck Drivers	70	22.3	0.1
Carpenters	130	10.1	0.2
Electricians	120	8.3	0.1
Maintenance Repairers, General Utility	420	5.2	0.5
Trades, Helpers	100	12.7	0.1
Order Fillers	110	46.9	0.1
Maintenance Painters	160	7.4	0.2
Plumbers and/or Pipefitters	80	9.8	0.1
Sewers, Custom	80	12.1	0.1
Stationary Boiler Firers	50	20.6	0.1
Stationary Engineers	50	14.4	0.1
Gardeners and Groundskeepers	170	7.5	0.2
Ambulance Drivers and/or Attendants	120	19.7	0.1
Other Skilled Workers	180	N.A.	0.2
Other Semiskilled Workers	260	N.A.	0.3
Other Laborers	270	N.A.	0.3

HOSPITALS
(SIC 806)

(Continued)

Occupation	Estimated Employment	Relative Error %	Percent Distribution
Clerical Workers	13,590	N.A.	16.7
Clerical Supervisors	430	11.3	0.5
Office Machine Operators	850	N.A.	1.0
Bookkeeping/Billing Machine Operators	60	8.4	0.1
Computer Operators	500	31.0	0.6
Keypunch Operators	200	5.9	0.3
Other Office Machine Operators	90	25.3	0.1
Stenographers	480	6.3	0.6
Accounting Clerks	380	9.9	0.5
Bookkeepers, Hand	110	5.9	0.1
Cashiers	530	9.9	0.7
File Clerks	730	7.7	0.9
General Office Clerks	1,940	13.9	2.4
Insurance Clerks, Medical	980	3.7	1.2
Order Clerks	90	22.0	0.1
Payroll and/or Timekeeping Clerks	160	4.7	0.2
Personnel Clerks	160	3.5	0.2
Procurement Clerks	100	7.3	0.1
Receptionists	740	7.2	0.9
Secretaries	1,760	5.2	2.2
Statistical Clerks	370	24.2	0.5
Switchboard Operators	460	5.0	0.6
Switchboard Operators/Receptionists	270	5.1	0.3
Typists	900	7.3	1.1
Shipping and Receiving Clerks	90	7.6	0.1
Stock Clerks, Stockroom	280	8.8	0.3
Other Clerical Workers	1,780	N.A.	2.2
Sales Workers	40	N.A.	0.1
Sales Representatives	40	N.A.	0.1